Revenue Bonds

and the

Investor

by

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SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY
IN THE
FACULTY OF POLITICAL SCIENCE
COLUMBIA UNIVERSITY

New York
PRENTICE-HALL, INC.
1939

First Printing.........October, 1939

PRINTED IN THE UNITED STATES OF AMERICA

Preface

THE Federal Administration of Public Works has negotiated more than 1,000 revenue bond loans in less than four years' time and has aided in the passage of new revenue bond statutes in most of the 48 states. It would therefore seem worth while to seek the answers to such questions as: What are revenue bonds? When and where were they first used? What bodies employ revenue bonds at the present time? Are the bonds usable in connection with all utilities and services that are operated or furnished by political divisions? What effect is their use apt to have upon the extent of public ownership? Will the use of revenue bonds hasten the national rehabilitation of housing facilities? With the drift away from property taxation, especially from real property taxation as illustrated in the current movement to exempt homesteads, will revenue bonds tend to take the place of general obligation bonds in any considerable measure, or, on the other hand, will the use of revenue bonds end as did the use of the state-aid bonds—with changes being made in state constitutions in order to prevent the future use of the type? Light on these and many subordinate matters is believed to be shed by the facts and figures set down in the following pages.

It has been the thought of the writer that what is here set forth might prove to be, in some degree, helpful to administrative officials of public bodies, municipal bond counsel, and investment bankers, as well as to prospective investors.

I am especially indebted to Professor James C. Bonbright, Columbia University, for the original suggestion that I develop the topic of revenue bonds, and for his aid and advice from time to time.

In connection with the Washington phase of the study, no one could have been more generous of his time and patience than Mr. Morris Miller, Counsel, Federal Emergency Administration of Public Works, until December 1, 1937, and now Acting Assistant General Counsel of the United States Housing Authority.

His help was especially valuable in regard to legal aspects of the question.

The names of all the others who have aided me in one way or another, often very extensively, would make a long list. I can only express my great gratitude to them here, once more, in this collective fashion, with especial thanks to those New York municipal bond houses and their personnel, who advised me again and again.

L. S. K.

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CHAPTER I

Origin and Development

THE term *revenue bonds* means different things to different people. It is not infrequently used to refer simply to short-term anticipation securities; or, the term revenue bonds may be used loosely to refer to any bonds of a political entity that are payable solely out of a special fund. In the latter case its use is to distinguish such obligations from those that are backed by the full faith and credit of the issuing political unit as exemplified in the pledging of the power of taxation. For our purposes, *revenue bonds are all those bonds of political units that are payable as to principal and interest exclusively from the earnings, or (in case of a sale of the property) from other non-contributed assets, of a specified revenue-producing enterprise, for the acquisition, construction, improvement, or operation of which enterprise the bonds were issued.*

Revenue bonds, so defined, would include the obligations of a sovereign government as well as those of any of its subdivisions, including states, counties, townships, and municipalities, also the obligations of any agency of either the sovereign government or subdivision thereof, so long as the bonds conformed to the stated requirements as to the source of payment.

On the other hand, this definition excludes both the bonds for which only the full faith and credit of the entity, supported by the tax power, is pledged, and also those bonds which may be payable in the first instance out of the revenues from the utility or service, but which, in the absence of adequate returns from such enterprise, would be redeemed from some other source, or sources, including tax receipts. There are many such contingent obligations outstanding—usually the obligations of municipalities—but they occur even in such states as New Jersey, where the revenue bond, as here strictly defined,

cannot be legally issued by a municipality under the present laws.

This use of the term revenue bond also excludes obligations, the principal and interest of which are payable from some other enterprise than the one for which the funds are borrowed, or obligations that are payable from excise taxes, although the taxes may be closely related to the financed improvement. Highway bonds payable from gasoline taxes, as in Kansas and Colorado, are illustrations of this latter type of bond. They do not come within the present definition. On the other hand, a toll road bond would satisfy the requirements if it were to be serviced solely out of charges for the use of the road. Again, payments derived from automobile registrations, liquor and other licenses, penalties, forfeitures, and land grant funds, have all been upheld as proper sources of special funds that will support bond issues of public corporations, and bond issues that will be held to be outside of constitutional debt limits. The ensuing bonds, however, are not revenue bonds since they are sold in order to raise funds for enterprises that are unrelated to the sources of payment. Thus bonds for college dormitories that are financed out of matriculation or laboratory fees would not come within the definition, but would be true revenue bonds if they were payable out of room rents.[1] Since special assessment bonds are payable from taxes rather than from charges for service rendered, they cannot, of course, be classified as revenue bonds, and the same is true of the loans of nations which pledge salt taxes or customs receipts of various types as security for payment.

It should be evident from the definition that the existence or nonexistence of mortgage security has no necessary bearing on the question as to whether a given bond is a revenue bond. In some states the courts have held that a mortgage which covers property previously owned, in addition to that currently being purchased or constructed, prevents the accompanying bond from being classified as a revenue bond since, in case of default, it is not payable solely from the immediate project. On the other hand, most courts permit the use of mortgages if they relate only to the property that is being acquired.

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[1] See E. H. Foley, Jr., "Low Rent Housing and State Financing," 85 *Univ. of Pa. Law Rev.* 239, 248 (January 1937).

Europe

This practice of mortgaging public property gives a clue to the origin of revenue bonds. In 1895 the Supreme Court of the state of Washington upheld the city of Spokane in its attempt to issue revenue warrants, basing its decision on the similarity between the warrants under dispute and special assessment bonds. Both types were found (1) to be limited obligations of the community, (2) not to be payable out of general taxes, and (3) not to carry a pledge of the full faith and credit of the governmental unit. As the special assessment bonds had been held not to constitute a debt within the meaning of the state constitution and therefore not subject to debt limitation restriction, so, too, the revenue bonds were held to be exempt.

But while revenue bonds do have some similarity to assessment bonds, and perhaps even more resemblance to corporate income bonds, in that both revenue bonds and corporate income bonds are not payable from tax proceeds at all, but are dependent for payment upon the prosperity of the immediate enterprise, the more convincing antecedents are found in early governmental loans that carried pledges of specific revenues in addition to unconditional pledges of the borrowers' general credit. Omission of this pledge of the general credit (providing the revenues were derived from the activity for which the funds were borrowed) would result in a loan precisely like the modern revenue bond loan.

The pledging of revenue for the security of government debts has been noted as far back as a Venetian loan of 1187.[2] This loan was secured by a pledge of revenue to be derived from salt and seigniorage. Another secured loan, this time by the city of Florence, in 1307, is known, while in France the first discovered use was a loan that was protected by a pledge of customs receipts. This was in 1515. In Germany the secured loans granted to the European kings by the Fuggers in the sixteenth century have long been famous. Across the channel in England, it appears that that country's kings had frequently

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[2] Pierre Daru, *Histoire de la République de Venise* (Paris, F. Didot, Père et Fils, 1821), Tome 1, pp. 203–04, as cited by Raymond W. Coleman, "Pledged Revenue as Security for Government Bonds," *Amer. Econ. Rev.*, XXVI (December 1936), 667.

borrowed funds (prior to the setting up of constitutional government in 1689) by pledging jewels or mortgaging revenues, and that from 1689 until the 1720's the government continued to borrow on the basis of pledged revenues, mostly excise duties. English local governments have issued mortgage obligations from early times.[3]

The instances mentioned in the preceding paragraph appear to have been loans that were secured by the double pledge of specific revenues and payment out of other resources, if necessary.[4] Also, of course, the revenues that were pledged were not the direct fruits of the borrowed money. But that at least some of the early English government loans were not secured by other than the immediate collateral pledged seems clear from a special study that was made of national credit, in which it was stated, apropos of English methods of public finance in the late seventeenth century, that "in 1697 many of the revenues upon which the various [government] loans had been secured seemed likely to prove deficient, and the exchequer tallies in the hands of the public began to be sold at a heavy discount."[5] This decline would hardly have taken place had the "tallies" been backed by a promise to pay out of any and all sources of income.[6]

The first English cases of loans payable solely from the resources of the enterprise for which the funds were borrowed appear to be the toll road mortgage revenue loans of the early eighteenth century.[7] In the beginning the English had relied upon the labor of abutting rural property owners to keep their country highways in a proper state of repair. This labor was required by statute and consisted of a certain number of days

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[3] C. F. Bastable, *Public Finance* (Macmillan & Co., Ltd., London, 1917), p. 717.

[4] Richard Ehrenberg, *Das Zeitalter der Fugger* (G. Fischer, Jena, 1896), p. 37; translated under the title *Capital and Finance in the Age of the Renaissance*, by H. M. Lucas (Harcourt, Brace & Co., New York, 1928), p. 46

[5] F. W Hirst, *The Credit of Nations*, U S. Senate, 61st Congress, 2nd Session, Document No. 579 (U. S. Govt. Ptg. Office, Wash., D. C., 1910), p. 14.

[6] Provision was made, following the above-mentioned decline, for a rearrangement of the security by way of a "first general mortgage" on certain duties. A somewhat similar pooling of income as security for a general bond issue was recently undertaken by the Port of New York Authority when it undertook to convert issues, that were secured solely by individual projects of the Port Authority, into a huge general and refunding issue to be backed by a pledge of the Port Authority's entire earnings.

[7] Sidney and Beatrice Webb, *English Local Government: Statutory Authorities for Special Purposes* (Longmans, Green & Co., London, 1922), Chap. III, "The Turnpike Trusts."

work from the property owners each year. The state of the highways becoming worse and worse under this haphazard method of maintaining them, resort was had to a system of public turnpike trusts organized for the express purpose of maintaining particular highways. The trusts had the power to borrow money, to give mortgage security, to collect tolls, and to hire a permanent labor force. The first statutory authorities created for the sole purpose of operating toll roads were created in 1706,[8] and Sidney and Beatrice Webb reported: "In no case that we have found were the Turnpike Trustees entitled to levy a rate, or even to claim a share of the various Highway Rates made by the Justices in particular parishes."[9] Since 1835, however, taxes have played an important part in English highway finance.

Toll bridges followed the toll roads and became common soon after 1725. Sometimes the power to operate the bridges was given to existing municipal corporations, sometimes to newly created public bodies of commissioners created for the special purpose (*i.e.*, statutory authorities), and sometimes to private speculators.[10]

Some of the oldest and most successful users of revenue bonds were the special harbor authorities. Originally the harbor rights and duties had been delegated to private individuals, whose unsatisfactory conduct of the port facilities caused Parliament to authorize the local magistrates to manage the harbor affairs. Still dissatisfied, Parliament authorized the organization of statutory authorities. In the beginning these authorities were composed of local government officials for the most part, but later they were expanded to include "other bodies and interests affected."[11]

The first statutory authority for harbors that had the power to borrow money but no right to levy or collect taxes appears to have been the Harbor of Dundee commission which was established in 1815. The Clyde Navigation Trust which had originally been organized in 1809 as a muncipal corporation

[8] *Ibid.*, p. 159.

[9] *Ibid.*, p. 161.

[10] Sidney and Beatrice Webb, *English Local Government: The Story of the King's Highway* (Longmans, Green & Co., London, 1913), p. 129.

[11] *On the Nature and Orgin of Revenue Bonds of Political Subdivisions* (Stranahan, Harris and Oatis Co., New York, 1928), p. 7. The following account of European experience is largely drawn from this source.

to manage the Glasgow harbor, became semi-independent in 1825, while the Harbor of Leith (Edinburgh) was put in the hands of a statutory commission in 1838. Until the organization of these independent or semi-independent bodies, any loans arranged by the communities had carried the promise to pay the obligations out of general funds and other sources of income, as well as out of the particular revenues of the harbors. The Port of London Authority, later to be the model for the Port of New York Authority, was established in 1908. No instance of any default on the part of any one of these statutory authorities is known.

In the field of gas utility finance it appears that the early debt of Manchester, England, was secured solely by a pledge of income, but in recent years a pledge of tax proceeds has been added.[12] A Parliamentary enabling act of 1875 provided that the city of Birmingham might mortgage its gas enterprise, the borough fund, or the "rate", or all three if it chose, as security for the needed gas loans, while a Glasgow loan of 1869 was secured both by a mortgage on the plant and by a promise of a tax levy.

In Norway a close approach to the revenue bond as we know it was found prior to 1914 in the obligations of the Royal Norwegian Mortgage Bank which had been established in 1851. These obligations were originally secured by the revenues of the enterprise and also by limited state contributions. Since 1914 the Norwegian government has guaranteed the bank's commitments and they therefore cannot now be classified as revenue bonds. Patterned after the Royal Norwegian Bank, the Mortgage Bank of Denmark was organized in 1906. It, too, has issued the equivalent of revenue bonds from time to time.

United States

The history of governmental participation in business enterprises during the eighteenth and nineteenth centuries was largely the story either of subsidies to private business ventures, such as the grants to the canals and railroads, or of projects that were owned outright by the government. In the

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[12] *Municipal and Private Operation of Public Utilities* (Nat. Civic Fed., New York, 1907), Part II, Vol. II, p. 143.

former case, the subsidies of course could not come from the revenues of the private projects, and in the latter case it appears that the financing was supported by a pledge of the tax power. Therefore, one looks in vain for revenue bonds in the earliest part of our country's history.

The first approaches to true revenue bonds seem to have been the bonds of the Philadelphia Gas Works and those of the municipally owned railroad of the city of Cincinnati, the Cincinnati Southern Railway. The Philadelphia plant had been owned by a combination of public and private interests prior to 1841, but in that year arrangements were made by the city to buy out the privately owned share. In connection with the necessary refinancing, an ordinance was passed directing the board of trustees (the public body in charge of the gas plant) "to set apart all the net profits after the payment of the interest upon existing loans to constitute a sinking fund which, together with the buildings, apparatus, pipes and fixtures, was specifically pledged for the payment of the principal and interest of all loans made on account of the gas works." Six loans were negotiated between 1841 and 1855. Under the terms of these loans, diversion of any portion of the plant's operating receipts to the general treasury of the city was expressly forbidden. In connection with later loans, only a portion of the profits were pledged to the sinking fund. All revenues were to be collected and all expenditures were to be made directly by the trustees. Contrary to the impression in some quarters, these bonds did not depend solely upon the receipts from the enterprise. The ordinance of 1841, Section I, as cited in Baily *v.* Philadelphia,[13] reads "*The faith of the city,* the said sinking fund, and the buildings, apparatus, fixtures and the income and profits of the said gas works shall be and they are hereby pledged for the punctual payment of the interest, and for the ultimate reimbursement of the principal of all the loans. . . ." Even under the 1835 ordinance the faith of the city was pledged.[14]

The Cincinnati Southern Railway was leased in 1881 to a subsidiary of the Southern Railway Company at a rental which more than covers the annual interest on the $21,918,239 of

[13] 184 Pa. 594, 598 (1898). Italics added.
[14] See Western Savings Fund Society *v.* City of Philadelphia, 31 Pa. 185, 186 (1858).

bonds now outstanding. Nevertheless, while the bonds are serviced out of the rentals received, they are the obligation of the municipality in the final analysis, and should the rental income cease for any reason, the city would still be liable for payment. The city, in case of default, would even be subject to court order to levy a special tax in order to raise the necessary funds.

The Tennessee legislature passed, and the governor signed, a bill in 1881 which provided that any municipality having more than 30,000 population "for the better security" of its obligations issued in furtherance of a water system might place the surplus revenues, over and above operating expenses, in a trust fund and pledge the same.[15] Ten years later another Tennessee law was enacted which provided that certain municipalities might acquire their own gas plants. The municipalities were authorized, by way of buttressing any resulting obligations, both to mortgage the plants and to pledge the net revenues of the enterprise.[16] Again, the cities appear to have been liable for the debts, if the revenues of the projects had proved insufficient.

The first revenue bond issue. The earliest bond issue that was definitely payable solely from the revenues of the project for which the funds were borrowed was the Spokane, Washington, revenue bond issue of 1897.

In 1895 a local investment firm, Theis and Barroll, had loaned the city of Spokane $300,000, taking 8 per cent warrants in return. As security the city had pledged 60 per cent of the gross revenues from the waterworks system. As these gross revenues amounted to about $75,000 per year there was a pledge of about $45,000 a year, or somewhat less than twice the amount of the annual interest charge. The authority of the city to issue these warrants was upheld by the state supreme court in the case of Winston *v.* City of Spokane.[17]

Although the warrants were callable when and if funds were on hand, they promised to be fairly long-term investments as they were payable only out of a special fund, and

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[15] Pub. Laws (1881), c. 12, sec. 4.
[16] Pub. Laws (1891), c. 44, sec. 4.
[17] 12 Wash. 524, 41 P. 888 (1895). Only because of the temporary nature of these warrants and their uncertain length of life at the time of issue are they not considered the earliest revenue bond issue.

especially in view of the fact that the excess earnings pledged were equal to only about 7 per cent of the issue.

Shortly after the sale of the warrants, however, the city requested bids for a twenty-year serial refunding waterworks issue of 5 per cent revenue bonds in an attempt to reduce the cost of the waterworks money. The city was unable to pledge its tax power in support of the bonds because of charter restrictions limiting the annual tax levy for municipal purposes to 5 mills on the dollar. With an assessed valuation of only $16,000,000 and $700,000 of 5 per cent bonds outstanding already, there was no likelihood that further tax money could be diverted from general municipal needs to support additional bonds. Attempts to sell the 5 per cent refunding water revenue bonds were unsuccessful,[18] the investment bankers being uncertain of the legal and economic status of the new type. Furthermore, Mr. Barroll was not enthusiastic about the possibility of having his 8 per cent investment retired so soon, and intervened in the suit of Kenyon *v.* City of Spokane,[19] alleging that the city had no right to pay off his warrants except from revenues of the waterworks. The state supreme court held, however, that the city had promised only to pay him out of the waterworks *fund,* and if it sold new bonds and turned the money into that fund he would not be deprived of any contract right, despite the fact that the source of the fund was other than he had anticipated.

Finally, after two years, the court having sided with the city as to its right both to issue the bonds and to pay the Theis and Barroll warrants, and the proffered interest rate having been raised to 6 per cent, the city disposed of the first municipal revenue bonds in the amount of $350,000.[20] Actually the obligations, in the end, were termed warrants, upon the advice of legal counsel, but it was stated at the time that the obligations were "bonds in every essential having definite dates for payment of both interest and principal."[21] Dated January 1, 1897, the bonds matured serially up to, and including, January 1, 1917.

While the tax limitation was given as a reason for selling

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[18] *Daily Bond Buyer,* X (April 17, 1896), 257.
[19] 17 Wash. 57, 48 P. 783 (1897).
[20] *Daily Bond Buyer,* XII (June 15, 1897), 591.
[21] *Com. and Fin. Chron.* LXIV (June 26, 1897), 1242.

obligations secured solely by revenues, the existence of debt limitation provisions in the state constitution would have done just as well as an explanation. The city of Spokane admitted, in its answer to the complaint filed in the Winston *v.* City of Spokane case,[22] that it had exceeded the debt limit prescribed by the constitution.

Other early loans. In 1898 the city of Seattle apparently turned over to a contractor, in payment for construction work done, warrants payable solely from a fund that was created by an allocation of 75 per cent of the gross receipts of its Cedar River water supply system.[23]

Two years later, in 1900, the city of Plymouth, Wisconsin, issued $70,000 of 5 per cent serial waterworks mortgage bonds, maturing up to 1928. This financing was carried out in connection with the acquisition of the city's first owned plant and the bonds were eventually all retired out of earnings.[24]

Seattle sold further revenue obligations in 1901 under the title of Cedar River Water Supply 5 per cent warrants, due 1920.

In this same year, 1901, the city of Joliet, Illinois, undertook to issue revenue bonds accompanied by a mortgage, but a court injunction before the year was out restrained the city from selling the bonds. When the case was appealed, the state supreme court sustained the lower court, arguing, among other things, that the arrangement provided for a diversion of income previously enjoyed by the taxpayers, since revenues of a property that was already owned were to be pledged as security in addition to the anticipated revenues from the new equipment.[25] This pledge of income that had been hitherto unencumbered was held to constitute the incurring of a debt. As the city was already indebted beyond its constitutional right, the restraining order asked for was granted.

Five years later the Illinois courts upheld Chicago's proposal to issue street railway revenue bonds, insofar as they constituted a pledge of the income and property to be acquired, but since the statute also provided that a right to operate the

[22] See Footnote 17.

[23] Faulkner *v.* City of Seattle, 19 Wash. 320, 53 P. 365 (1898).

[24] David E. Lilienthal, "Commission Regulation of the Issuance and the Accounting Treatment of Security Issues for Water Works Purposes," *Jour. of the Amer. Water Works Assn.*, XXV (December 1933), 1702.

[25] City of Joliet *v.* Alexander, 194 Ill. 457, 62 N. E. 861 (1902).

street railway for a period of twenty years should go to the purchaser of the property in case of foreclosure, this was again held to create a debt, in that property rights already owned were pledged.[26] As a result, the bonds were never issued.

In 1903 the board of water commissioners of the city of Charlotte, North Carolina, was authorized by a special act[27] to issue mortgage revenue bonds and to the extent of $110,000 did so, but apparently the experiment was not a very great success marketwise. To make possible the refunding of the short-term 6 per cent mortgage bonds which matured June 1, 1905, a new act authorized the city, itself, to sell orthodox tax obligations, secured additionally by a pledge to maintain and allocate revenues in accordance with a prescribed plan.[28] As a result of the newly received power, thirty-year 4½ per cent bonds replaced the short-term 6 per cent revenue bonds.

In 1908 Seattle sold another Cedar River waterworks issue and in 1909 Tacoma issued 6 per cent water revenue bonds.[29]

The early revenue loans were thus very largely, if not exclusively, issued in connection with water projects.

The first electric light and power revenue bond loan was a 1910 Tacoma issue of 5 per cent bonds that carried a 1926 maturity date.

The next year, 1911, Spokane sold another issue of serial water revenue bonds. This time the city paid 5 per cent on an issue of $1,250,000, the bonds to mature from 1912 to 1931.[30] These bonds were junior to the unmatured portion ($147,000) of the original 1897 issue of $350,000 6 per cent warrants which was cited as the earliest revenue bond issue. This custom of subordinating later issues to preceding ones is more or less peculiar to the state of Washington, and is still customary—especially in connection with the large issues marketed by Tacoma and Seattle. Instead of treating the holders of all issues substantially alike, as is done in open or limited open

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[26] Lobdell *v.* City of Chicago, 227 Ill. 218, 81 N. E. 354 (1907).

[27] Private Acts (1903), c 196.

[28] Private Acts (1905), c. 112.

[29] Dates of issue for early revenue bonds are most easily located by consulting the annual State and City Supplement (now called State and Municipal Compendium) of the *Commercial and Financial Chronicle,* and the yearly volumes of the *Moody's Manual: Governments and Municipals.*

[30] *Com. and Fin. Chron*, XCIII (Dec. 23, 1911), 1740. For an advertisement of the offering, see p. xviii of the same issue.

end securities, the subsequent investors in later Washington issues tend to have an ever inferior position.[31]

Tacoma appears to have been first again with street railway revenue bonds. This was a small issue put out in 1914, paying 6 per cent and maturing from 1918 through 1921.

Seattle's first electric light and power revenue bond issue was sold in 1917.

The next year both of the cities issued street railway revenue bonds in connection with their purchases of the privately owned surface lines.

Through the period just prior to 1920, Seattle, Tacoma and Spokane sold additional blocks of revenue bond securities from time to time, and, in addition, such Washington cities as Aberdeen, Centralia, Everett, and Walla Walla also came into the market.

After the World War the issues came much more frequently and the practice of utilizing revenue bonds began to spread across the country. Green Bay, Wisconsin, in 1920, sold $975,000 worth of 6 per cent water revenue bonds. These were payable from gross receipts of the enterprise and matured serially, to November 1, 1960.[32] Bay City, Michigan, in 1921, issued 5½ per cent water revenue mortgage bonds and came into the market again four years later at the same interest rate.

In 1912 the state of Ohio had written into its constitution permission for its municipalities to issue revenue bonds if secured by a statutory mortgage, *i.e.*, a mortgage carrying limited rights to the mortgagees, the rights not to exceed those provided for by the enabling legislation. No early advantage appears to have been taken of this constitutional amendment and the first Ohio revenue bond known is a 1922 issue of drainage bonds by the state itself which the state supreme court upheld insofar as the issue would be payable solely from the revenues of the improvement.[33] A loan arranged by the city of Bucyrus in 1926 is the earliest Ohio municipal revenue bond of which there is any record.

In 1921 the first United States counterpart of the Port of

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[31] For further discussion of this practice see pp. 148–150.

[32] *Com. and Fin. Chron.*, CXI (Nov. 20, 1920), 2065.

[33] *On the Nature and Origin of Revenue Bonds*, etc., p 13. See Kasch *v.* Miller, 104 Ohio St. 281, 135 N. E. 813 (1922).

London Authority of 1908 was established when the Port of New York Authority was incorporated. Described as "a municipal corporate instrumentality of the States of New York and New Jersey, created with the consent of Congress by the compact of April 30, 1921, between the two States, to carry out their pledge of 'faithful cooperation in the future planning and development of the Port of New York,'"[34] it is second only to the Federal Intermediate Credit Banks as a supplier of revenue bonds today. Having no power of taxation, it nevertheless had over $204,000,000 of funded debt outstanding as of December 31, 1938. The Port Authority seems to have been the first public body to sell bridge revenue bonds in this country.[35]

From 1924 through 1927 the city of St. Louis, Missouri, issued an aggregate of $10,000,000 worth of water revenue bonds and in the same period the cities of East Chicago, Indiana; San Antonio, Texas; Bucyrus, Ohio; and Bowling Green, Kentucky, all issued water revenue bonds.

The first *municipality* to make use of bridge revenue bonds seems to have been the city of Louisville, Kentucky. Acting through the Louisville Bridge Commission, this city issued $5,500,000 of 4½ per cent bridge revenue bonds in 1928, in order to finance the construction of a bridge across the Ohio River between Louisville, Kentucky, and Jeffersonville, Indiana.

Recent revenue bond loans. With the collapse of business, the Reconstruction Finance Corporation was formed and given authority to make self-liquidating loans. Finding that many communities could not borrow on full-faith-and-credit obligations without exceeding their debt limits, the RFC began to make loans to the local bodies to be repaid solely from revenues. In the course of making the loans (43 such loans were made prior to May 26, 1938), the RFC frequently found that the municipalities had no power to issue bonds without concurrently levying a tax for their payment. With the transfer of the functions of the RFC to the Federal Emergency Administration of Public Works (or PWA, as it is more frequently called) in 1933, statutory legislation of a remedial

[34] *Moody's Manual: Governments and Municipals* (New York, 1937), p. 1148.
[35] For further discussion see Chap. IX.

nature was suggested to many of the states by the PWA. When enacted, as it usually was, the legislation provided the municipalities with the statutory power to issue bonds not backed by taxes, but only by revenues.

Since 1933 the PWA has been responsible for over 1,100 revenue bond loans totaling more than $180,000,000 in some 39 states. These loans represent nearly 40 per cent of all loans made to political subdivisions by the Public Works Administration, whether the unit of measure be the number of loans, or the volume of business measured in dollars.

Summarizing, one may say that revenue bonds got their start in the Far West, that the growth in use was slow until the late 1920's and that apart from the PWA loans the use, as far as volume is concerned, is still largely confined to the Pacific Coast, and to special authorities, although there are a large number of comparatively small loans in the Middle West.

History of Legislation

State and municipal. Had not a divided New York court decided adversely in 1851, the first constitutional revenue bond statute would have been Chapter 485 of the New York Laws of 1851, a date some 45 years earlier than that of the first legislation that was judicially approved. The object of the 1851 law was to hasten completion of the Erie Canal by permitting the raising of much-needed immediate funds. This was to be accomplished through borrowing against future toll receipts.

Many of the best features of present day revenue bond statutes are found well developed in this early statute. For instance, the statute emphasized the limited recourse available to the bondholders by stipulating that the obligations "shall purport on their face to be issued by virtue of this act, and without any other liability, obligation or pledge on the part of this state." A maturity limit was set—in this case 21 years—also a maximum interest rate of 6 per cent; a replica of the certificates to be issued was included in the statute; stipulations were made as to the application of surplus revenues, and the surplus funds were to be held in a separate and distinct fund; the first two years' interest was to be paid from the proceeds of the loan, and the statute ordered the canal

board to adjust the rates of toll in such manner as would, in their judgment, produce the greatest amount of trade and revenue. Sections 12 and 14 of the statute reiterated the limited nature of the security, warning the certificate holders that they could not look to any fund other than that resulting from the surplus revenues.

However, the New York court decided that, since the state constitution required that all surplus revenue over and above operation and maintenance should be devoted directly to completing the canal "in each fiscal year" in which the surplus accrued, the proposed borrowing was illegal for two reasons: [36] First, it would be an improper advance realization and application of the revenues prior to the years in which the surpluses would actually occur; and, secondly, it would be a diversion of the tolls, in part, from directly "completing" the canal towards the payment of interest, which latter use was not named in the applicable constitutional provision.

The earliest judicially approved legislation, therefore, appears to have been Chapter 112 of the Washington session laws of 1897. The distinctive features of this first revenue bond statute are worth quoting at length.

> A special fund may be created for the sole purpose of defraying the cost and expense of the construction or acquirement of each class of improvements or lands contemplated or any combination thereof, together with such interest as shall accrue upon the obligations issued therefor. into which said fund the authorities of said city or town may obligate and bind the said city or town to set aside and pay a fixed proportion of the revenues or proceeds to be derived from the plan or system, lands or uses of which the said improvement forms the whole, or part, so long as any obligations are outstanding against said fund. In fixing said proportion the authorities of such city or town shall have due regard to the cost of operation and maintenance of the plant or system as constructed or added to, and shall not set aside into the special fund a greater proportion of the revenues or proceeds than, in their judgment, will be available over and above such cost of maintenance and operation. The city or town authorities may from time to time, by ordinance, transfer to any such special fund any other available funds of said city. Bonds or warrants may be issued against any such special fund to the amount of the costs or charges to be met therefrom . . . And any such bonds or warrants issued against any special fund as herein provided shall be a valid claim of the holder thereof only as against the

[36] Newell *v.* People, 7 N. Y. 9 (1852). Some reference was made to the assertion that the obligation was a debt of the state and therefore unconstitutional, but this point was not stressed in the main opinion.

said special fund and the fixed proportion of special revenues obligated to be set aside therein, and shall not constitute an indebtedness of such city or town within the meaning of the constitutional provisions and limitations. . . . Each such bond or warrant shall state upon its face that it is payable from a special fund, naming said fund and the ordinance creating it. . . . Upon the creation of any such special fund and the issuance of any such obligation against same, the fixed proportion of revenue shall be set aside and paid into said special fund as provided in the ordinance creating said fund, and in case any city or town shall fail to thus set aside and pay such fixed proportion as aforesaid, the holder of any bond or warrant against such special fund may bring suit or action against said city or town and compel such setting aside and payment.

The major points of interest in this statute are (1) the setting up of a special fund, (2) the declaration that the fund should consist of not more than the anticipated net income of the project, (3) the requirement that the limited nature of the obligation should be stated on the face of each bond or warrant, and (4) the provision respecting the remedies available to the investors in case of failure by a municipality to perform its duty.

The appearance of this statute some two years after the right to issue revenue obligations had been upheld by the state supreme court calls for a word of explanation.

In contradistinction to a sovereign power, such as the Federal or state governments, the municipality has but limited powers. These powers are limited, it is said, to three types, viz., to those that are expressly conferred upon it by its creator, the state; to those that are implied in connection with the expressly conferred powers; and to those that are incidental and necessary to the community in carrying out its express or implied powers. While the powers of a sovereign government will be broadly construed by the courts, those of the municipality will be strictly interpreted.

Oddly, then, the city of Spokane was upheld in its right to issue revenue obligations, in the suit of Winston *v.* Spokane already referred to,[37] despite the fact that no authorizing statute could be cited, the court being satisfied when it could find nothing in the state constitution forbidding the issuance. This decision, which appears to be contrary to the strict construction theory as to municipal powers, may be explainable

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[37] See Footnote 17.

by attributing to the court a liberal interpretation of the implied powers doctrine, or, secondly, a belief in the existence of reserved powers by municipalities (a western doctrine that is consistent with the greater prevalence of home rule charters in the West than in the East), or it may have been due to a failure of the plaintiff's counsel to plead the lack of statutory authority.[38] Even the city's 1897 issue was based on the law as it stood in January, two months before the first statute was passed.[39]

The next statute enacted by one of the states appears to have been the Illinois law of 1899.[40] In the same year Wisconsin provided for the issuance of revenue bonds for waterworks, and two years later amended the act to include electric light plants.[41] Section 127 (b) of the Virginia constitution of 1902 refers, somewhat obliquely, to revenue bonds, and a statute of the same period provided that revenue bonds could be issued for any income-producing enterprise.[42] The North Carolina legislature, in 1903, passed an act authorizing the city of Charlotte to issue mortgage bonds to be secured by property taken over from the Charlotte City Water-Works Company, and by any later acquired property, such bonds to be issued in order to raise funds to make possible additions and betterments.[43]

Pennsylvania enacted a revenue bond law in 1907 and amended it two years later.[44] It, too, was applicable to the water supply of municipalities, but the state supreme court in the case of Lesser *v.* Warren Borough [45] declared the acts to be unconstitutional in that they pretended to authorize political units to mortgage their properties without incurring indebtedness. A constitutional amendment making such mortgages legal was passed in 1913.

The first constitutional amendment that took direct notice

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[38] See Fairbanks, Morse and Co. *v.* City of Wagoner, Okla., 81 F. (2d) 209 and Fairbanks, Morse and Co. *v.* City of Wagoner, 86 F. (2d) 288, where the first decision was altered when the issue of a lack of statutory authority which had not been raised at the first trial was introduced at the second.

[39] See Kenyon *v.* City of Spokane, 17 Wash. 57, 61, 48 P. 783, 785 (1897).

[40] Laws (1899), p. 104.

[41] Laws (1899), c. 348, as amended by Laws (1901), c. 143.

[42] Acts (1902–04), p. 412, as amended from time to time. See sec. 1033 g (b).

[43] Private Laws (1903), c. 196.

[44] Laws (1907), p. 355 as amended by Laws (1909), p. 135.

[45] 237 Pa. 501, 85 A. 839 (1912).

of revenue bonds was the addition made to the Michigan constitution in 1909 and known as Art. VIII, sec. 24. It reads:

> When a city or village is authorized to acquire or operate any public utility, it may issue mortgage bonds therefor beyond the general limit of bonded indebtedness prescribed by law: *Provided,* That such mortgage bonds issued beyond the general limit of bonded indebtedness prescribed by law shall not impose any liability upon such city or village, but shall be secured only upon the property and revenues of such public utility, including a franchise stating the terms upon which, in case of foreclosure, the purchaser may operate the same, which franchise shall in no case extend for a longer period than 20 years from the date of the sale of such utility and franchise on foreclosure.

In the same year, 1909, Michigan enacted correlated statutes that enabled the state's communities to act under the above constitutional amendment.[46] Texas appears to have been the next state to pass a revenue bond statute, the date, 1911.[47]

Ohio followed, substantially, the Michigan constitutional amendment in amending her own constitution in 1912, and Pennsylvania in 1913 as a result of the adverse decision of Lesser *v.* Warren Borough,[48] amended her constitution to permit any county or municipality (other than Philadelphia) to issue mortgage revenue bonds.[49] Correlative laws were enacted in 1915.[50] Ohio, because of its home rule status, did not bother to enact a revenue bond statute until 1919 when it passed a law authorizing the issuance of revenue bonds by the state itself, such bonds to be used in connection with its flood-control program.[51] In the same year Wisconsin enacted a second law,[52] and the following year Missouri became the fifth state to write revenue bond provisions into a constitution. Three states took action in 1921, Louisiana with both a constitutional amendment and a statute,[53] while Missouri [54]

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[46] Pub. Acts (1909), No. 278 as amended by Pub. Acts (1921), No. 349, and by Pub. Acts (1929), No. 153. Also Pub. Acts (1909), No. 279 as amended by Pub. Acts (1913), No. 5, and by Pub. Acts (1915), No. 210.

[47] Acts (1911), c. 112.

[48] 237 Pa. 501, 85 A. 839 (1912).

[49] Art. IX, sec. 15.

[50] Laws (1915), p. 312, and p. 846.

[51] Const. Art. 18, sec. 12. Laws (1919), Pt. I, p. 220. Gen. Code, sec. 412–2.

[52] Laws (1919), c. 595.

[53] Const., Art. 14, sec. 14 (m), and Acts (Ex. Sess. 1921), No. 80.

[54] Laws (1921), p. 165.

and Indiana[55] enacted statutes. Kentucky was next in 1926,[56] with Pennsylvania[57] and Texas[58] following in 1927. The Pennsylvania law repealed the one of 1915 and provided a new revenue bond statute in its place. Nebraska[59] and North Dakota[60] came next, in 1929, and Alabama,[61] Iowa[62] and South Dakota[63] completed the pre-depression period of revenue bond legislation with their statutes, all passed in 1931. In 1933, with the coming of the PWA there came a flood of revenue bond statutes, until today all the states except seven have some sort of authorizing statute.[64] Utah and Wisconsin became the most recent of the eight states which have inserted revenue bond provisions into their constitutions when they altered their basic laws in 1932.[65]

As already noted, the earliest revenue bond law was applicable only to waterworks and this was true of the Illinois statute also. Michigan's Act of 1909 included all public utilities, while Missouri in 1921 enumerated seven types of eligible projects: water, gas, light works, street railways, telegraphs and telephone, heating, and ice plants.

The more common municipal public utilities, such as water, electric light and power, gas—all well-tried, stable, income-producing projects—would seem to be the most likely fields for revenue bonds, but in later years the principle of revenue bond financing has been extended, both in states already having enabling legislation, and in new states, to such projects as sewer works, toll bridges, tunnels and wharves, until in the New Hampshire Act of 1935 more than forty different types of enterprises were named, including abattoirs, airports, auditoriums, town halls, community houses, hospitals, jails, libraries, markets, playgrounds, golf courses, schools, streets, swimming pools, and even sidewalks, gutters and storm sewers.[66]

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[55] Acts (1921), c. 96.
[56] Acts (1926), c. 133.
[57] Laws (1927), p. 519, Art. XXIV.
[58] Acts (1927), c. 194.
[59] Laws (1929), c 176.
[60] Laws (1929), c. 172.
[61] Gen. Acts (1931), No. 118.
[62] Acts (1931), c. 158 and c 159.
[63] Sess. Laws (1931), c. 194.
[64] These states are Maine, Massachusetts, Rhode Island, New Jersey, Maryland, Oklahoma, and Idaho.
[65] Const., Art. XI, sec. 5(d), and Const., Art. XI, sec. 3, respectively.
[66] C. 113.

The act provided for the issuance of either general obligation bonds, or revenue bonds, and it would appear to be permissible to sell revenue bonds in connection with any of these projects if the only security for the payment of the bonds were a pledge of the receipts to be derived from the respective services rendered.

Authority legislation. Authority legislation is of three kinds. It may directly create an authority as an instrumentality for financing and operating a particular revenue-producing enterprise; it may be of such a nature as to make possible the formation of authorities by mere compliance with a general law; or it may empower existing state agencies to act as authorities.

Intrastate authorities of the "particular" type were first legalized by statute in the state of Maine in 1899. The Kennebec Water District is the earliest of several such districts that have been created in that state. New York and New Jersey followed with the Port of New York authority legislation in 1921 and subsequent years. New Jersey passed further authority legislation in 1926, Alabama in 1927, and California and New York in 1929.[67] Georgia, in 1931, was the only other pre-1933 example. General laws of the second type, *i.e.*, those providing for the creation of authorities whenever the organizers should comply with the enabling statute were all acts of 1933 or later, with the exception of Wisconsin which enacted its law in 1931.

Laws of the third type, authorizing existing public corporations to issue revenue bonds, were enacted in Indiana and Oregon in 1927, in Montana, Oklahoma and West Virginia in 1929, and in nine other states in 1933 and later years.

The particular authorities have in the majority of cases been organized for purposes of promoting toll bridges. Water supply, canals, rural electrification, ports, tunnels, markets, and river control, listed approximately in the order of frequency with which they are mentioned in the statutes, are other developments for which special bodies have been incorporated.

Statutes of the "general" type have been designed primarily

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[67] For a list of recent authority statutes, see E. H. Foley, Jr., "Revenue Financing of Public Enterprises," 35 *Michigan Law Rev.* 35 ff. (November 1936).

to make possible the setting up of public housing corporations. They reflect the wishes of the administration in Washington, and also the desires of the states that they may be ready on short notice to share in the long-promised housing rehabilitation program. More than two-thirds of the 19 states which had "general" statutes in 1936 made provision for housing.[68] In some of the states, housing is the only purpose for which a corporation can be formed under the general enabling legislation, whereas in other states it is only one of several possible purposes. Three of these alternative purposes are power districts, nonprofit rural electric membership corporations, and improvement authorities designed to furnish the usual utility services or to maintain highway facilities.

Those statutes authorizing *existing* public corporations of states to issue revenue bonds have mainly to do with enlarging the powers of educational institutions to borrow on the security of charges made for the use of such school facilities as dormitories, laboratories, gymnasia, dining rooms, and the like.

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[68] *Ibid.*

CHAPTER II

Revenue Bond Legislation

State

LEGISLATION to enable states to issue revenue bonds is particular rather than general in nature. Whereas it is customary to enact general laws under which some or all of the municipalities of the state may issue revenue obligations, no such authority is needed by a sovereign body to enable it to make use of the device. Barring constitutional restrictions the state legislature, at most, needs only to enact a law authorizing the proper officials to issue revenue bonds. Illustrative of the relative freedom possessed by the state in the issuing of revenue bonds is the following quotation from a case decided by the Oklahoma Supreme Court in 1925: "So we find that municipal subdivisions must have express authority, while the sovereign, to be limited, must have express limitations." [1] Consequently, existing state revenue bond legislation deals mainly with the setting up of an authority or commission to manage some enterprise in the interests of the state, and to sell such state university dormitory bonds, state bridge bonds, or other state obligations, as may appear to be necessary or desirable to accomplish the objective of the authority or commission.[2]

Municipal

When the inquirer comes to the revenue bond statutes that are applicable to political subdivisions of the state, he will not necessarily find sharp differences between such statutes and the conventional general obligation statutes with which

[1] Graham *v.* Childers, 114 Okla. 38, 40, 241 P. 178, 180 (1925).

[2] Many state authority acts are cited in E. H. Foley, Jr., "Revenue Financing of Public Enterprises," 35 *Michigan Law Rev.* 35ff (November 1936).

he may already be acquainted. Both may limit the political units to which they apply (for example, to "cities of the second and third classes"), or both may apply to all of the political divisions of the state. Again, they may both be drawn to enable the political unit to finance a single type of utility such as water supply or sewer, or they may be general in nature and apply to any and every publicly owned utility. In fact, a single statute is occasionally drawn in which the provisions to be included in case the political body elects to sell revenue bonds, as well as those to be incorporated should the unit choose to issue general obligation bonds, are both specified. An illustration of this tendency to combine the types is found in an Oregon act which reads, in part, that the governing body's resolution shall include "a brief concise statement of the fact whether such bonds will be payable (1) exclusively from revenues, or (2) exclusively from taxes, or (3) from revenues and, in the event of a deficiency in such revenues, from taxes, or (4) from taxes and additionally secured by a pledge of revenues."[3] Most of the later sections of the statute are then equally applicable whichever one of the four types of bonds is actually issued.

Not only are the types of obligations similar enough to warrant including the terms for their issuance in a single statute, but occasionally, though not combined, the statutes may be similar enough to be confused as to type. There are general obligation statutes[4] which have provided so particularly for the collection and allocation of charges or rentals that they have appeared to readers to constitute revenue bond statutes, when as a matter of fact the full faith and credit of the community was pledged and the required application of the revenues was only stated as an additional safeguard to the bondholder, or, quite conceivably, to the taxpayer.

And yet, although this similarity is not infrequent, the revenue bond statutes are commonly distinguishable from legislation that authorizes the issuance of general obligation bonds. Accordingly, those features that are typical of revenue bond statutes will be emphasized in the remainder of this chapter.

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[3] Oregon Laws (1937), c. 455, sec. 4. Also Arizona, Laws (3rd Spec. Sess. 1933), c. 9 and Virginia, Acts (Ex. Sess. 1933), c. 26

[4] See chap. 221 of the Minnesota Laws of 1935, and chap. 30 of the Maryland Laws passed at the special session of 1933

It has already been pointed out [5] that many, even most, of the devices or provisions that are found in the present statutes appeared, in embryo, at least, in the earlier statutes. It should not be inferred from this fact, however, that there is any wide acceptance of a uniform revenue bond statute. Even though most of the revenue bond laws have been enacted since March 4, 1933, and despite the further fact that most of these laws were prepared in their original form by administration attorneys in Washington, there is still much variety in the laws. Among the reasons for this dissimilarity are differences in state constitutions, which in some cases require unique statutory provisions,[6] the existence within the state of political bodies of such unequal importance as to call for special treatment,[7] or previously enacted statutes which may make possible the use of a short revenue bond statute by way of mere supplement.[8]

Furthermore, a state may have any number of revenue bond statutes. The early statutes may have related to a smaller number of political units, or to a more restricted list of utilities, than later seems necessary or desirable. Again, the state may, at the later date, simply wish to add to the powers already delegated to the political subdivisions. Rather than repeal the old law and enact a new one, or in lieu of amending the old law, the state legislature may simply pass the new law by way of addition to the powers already given. As a result, a state may have any number of revenue bond laws applying, say, to the water utilities.[9] Where there are several usable but slightly dissimilar statutes, the selection of the most advantageous statute may be a matter of some importance to the community that is about to borrow.

The Typical Statute

Perhaps the best method by which to become familiar with revenue bond legislation is to study the statute of a particular

[5] See pp. 14–15.

[6] For instance, the West Virginia Constitution, Art. 10, sec. 8, designates the unusual period of 34 years as the maximum length of life for bonds issued in that state.

[7] Louisiana, Acts (Ex. Sess. 1921), No. 80. This act applies to any municipal corporation except New Orleans.

[8] Vermont, Acts (1935), No. 69.

[9] See, for instance, the numerous waterworks statutes in the state of Indiana.

state, and simultaneously to compare it with the prevailing practices as revealed by a survey of statutes throughout the country. Taking the Alabama statute, as amended, as representative of revenue bond legislation,[10] one finds that the act contains provisions (1) applicable to the period prior to the sale of the revenue bonds, (2) having to do with the form and content of the bond itself, (3) relating to the sale of the obligation, and (4) dealing with the post-sale period. The original statute covered 11 pages in the session laws for the year, and was made up of 36 sections.

Pre-sale provisions. In the sections dealing with the pre-sale period one first finds a list of the political bodies that are authorized by the statute to engage in revenue bond financing —in this case "any county, city or incorporated town." In an examination of 41 statutes[11] from as many states, this list of public bodies that was authorized to issue revenue bonds was found to vary from a single political unit, as in the case of the Pennsylvania boroughs, to a Colorado list including "counties, cities, towns, school, irrigation, drainage or sewerage districts, Federal Reclamation projects and water users Board of Control thereof, the Colorado State Fair Commission, other political subdivisions, or governmental agencies of this State."[12] However, the most common provision is one enabling "any incorporated city or town" to issue revenue bonds. In only ten of the statutes were counties as such authorized to make use of revenue bonds.

Then follow, in our typical statute, statements as to who shall constitute the governing body to exercise the authority

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[10] Gen. Acts (Ex. Sess. 1933), No. 102, as amended by Gen. Acts (1935), No. 46, and by Gen. Acts (Spec. Sess. 1936–37), No. 203. The original statute was selected by the American Municipal Association of Chicago as a model revenue bond statute.

[11] One statute from each state which has general revenue bond legislation was consulted in order to obtain an impression of what is customary by way of statutory provisions throughout the country. Had different statutes been chosen the results would likely have varied slightly. Thus the summary constitutes a sampling of statutes, rather than a portrayal of the state law in each state. Only an exhaustive study of constitutions, statutes, charters, ordinances, and judicial and administrative decisions can disclose the revenue bond law of a particular state.

[12] Laws (Ex. Sess. 1933), c. 16, sec. 2. The existence of a statute is no guarantee, of course, that any bonds have been issued in conformity with it, or even that they could be. No representations are made here as to the satisfactoriness of the cited statutes from a market standpoint. Some are certainly inadequate.

conferred and what duties they shall perform in advance of the revenue bond ordinance.

In many of the state revenue bond acts, a section is included that gives to the officials of the affected political subdivisions powers which they may exercise at their discretion. This permits flexibility in the actual provisions of the bonds as ultimately issued, and also makes for a shorter statute than is possible if every minute detail is prescribed. Thus the Alabama law authorizes the adoption of "any and all appropriate ordinances and resolutions deemed necessary to effectuate the full intent and purpose of this act." [13] The courts would hardly allow the municipality to interpret this authorization too broadly. The New York law of 1935 likewise leaves much of the detail to local judgment in providing that the bond resolution may contain covenants as to (a) the purpose or purposes to which the proceeds of sale of said bonds may be applied and the use and disposition of the same, (b) the use and disposition of the revenue of the undertaking for which the bonds are to be issued, including the creation and maintenance of reserves, (c) payment from the general fund for services furnished to the political entity, (d) the issuance of additional bonds, (e) operation and maintenance, (f) the carrying of insurance, (g) the keeping of books of account and their inspection and audit, and (h) the terms and conditions under which a receiver may be appointed.[14]

Following such provisions, the statute usually enumerates the utilities which the political unit may promote, and specifies the ways in which the entity may promote them.

The utilities included in the group of statutes examined range from a single one up to the more than 40 referred to previously in the case of New Hampshire.[15] Water supply is the most frequently named utility, although Minnesota, Nebraska and Wyoming, while providing for other types of revenue bond financing, do not appear to apply it to water.[16] Sewage is the second most common service mentioned. Twenty-four of the statutes authorize electric light revenue

[13] Sec. 6.
[14] Laws (1909), c. 24 as amended by Laws (1935), c. 525, sec. 1.
[15] See p. 19.
[16] Minnesota and Nebraska municipalities, through home rule charters, might issue water revenue bonds despite the absence of specific statutes.

bonds, and gas revenue bonds are authorized in an equal number of cases.

The delegated power, in connection with the revenue bond financing, may be limited, as in an Iowa statute, to financing in connection with the extending and improving of facilities already owned,[17] or it may be broad enough to enable the authorized body to "build, construct, reconstruct, erect, replace, extend, repair, better, equip, develop, embellish, improve, acquire by gift, purchase, or the exercise of eminent domain." [18]

Since the taxpayer is not supposed to be burdened in any way by a revenue bond project and since cash outlays may nevertheless be necessary, in advance of the time when the revenue bonds are to be sold, the South Carolina statute provides that "all necessary preliminary expenses . . . prior to the issue, sale and delivery of the revenue certificates herein provided for may be paid by the municipality to be reimbursed and repaid out of the proceeds of the sale of such revenue certificates." [19]

The Illinois Supreme Court, in connection with a suit that challenged the validity of an issue of revenue certificates, ruled that the fact that the construction engineers were actually paid out of the general funds, despite the express provision in the city ordinance that "all costs" should be paid out of funds arising from the sale of the utility certificates, was not material in a suit on the certificates. The facts as to the source of payment would be material only if pleaded in a separate suit brought against the responsible officials for misappropriation of funds, said the court.[20]

In some cases the preliminary expenses are simply not paid until after the proceeds of the bond issue have been received; or they may be paid out of current funds in the treasury which may have been derived from taxes in the first instance; or the necessary amounts may be advanced by the interested bond house. Not many statutes specify the means of payment for these investigation and other preliminary expenses, and few suits seem to have been brought testing the right of the public

[17] Acts (1931), c 159.
[18] Arizona Laws (3rd Spec. Sess. 1933), c. 9.
[19] Acts (1933), c 236, sec 5.
[20] Hairgrove *v.* City of Jacksonville, Ill., 366 Ill. 163, 174, 8 N. E. (2d) 187, 193 (1937).

entity to advance funds for what is supposed to be a wholly self-supporting project. It is said that, because of a lack of authority on the part of the Louisville Bridge Commission to pay for preliminary expenses, the sponsoring bond house advanced more than $15,000 in early expenses, including telephone bills and engineering outlays, in order to get the Louisville bridge built in 1928.

The requirement as to the holding of an election is the last matter of importance that is presented in the pre-sale section of the statute. No election is required under the Alabama law and this is rather typical. The theory is that since only the users will be charged for services rendered and since the inhabitants have the option to use or not to use the service, an election is not necessary. But in Kentucky the highest state court approved an ordinance which *required* abutting property owners to make sewage connections with a project that was financed by the sale of revenue bonds and for which no election was held; [21] in addition, the ordinance provided for a fine or imprisonment if such connections were not made. The question may also be raised as to whether it is proper to look upon the use of the facilities bought with revenue bond proceeds as "voluntary," where the community provides the sole water, sewage or electric light service, even though there is no ordinance requiring that a connection be made.

An election is required in 14 of the 41 statutes, and may be required in 10 others under certain circumstances. Such circumstances include the filing of a petition for a referendum by a certain percentage of the voters, or the expressed desire of particular types of political subdivisions to issue revenue bonds. Thus an election may be required if a county is the political unit involved, while a city may be exempt. Seventeen of the statutes are either silent on the matter or expressly indicate that no vote is necessary.

Where a vote is required, the statute may require approval of the issue by a mere majority of the qualified voters voting (the usual provision), or by a majority of that restricted group of qualified electors who pay property taxes and vote,[22] or by

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[21] Nourse *v.* City of Russellville, 257 Ky. 525, 78 S. W (2d) 761 (1935).

[22] Arizona: Laws (3rd Spec. Sess. 1933), c. 9; also Texas: Acts (1927), c. 194, as amended.

as much as two-thirds of the votes cast.[23] Furthermore, the proportion of approving votes required may vary according to whether the bonds are to be sold in order to enlarge a utility that is already in existence, or whether the proposal is to finance an entirely new utility. In Kansas a two-thirds vote is required for the promotion of a new plant, but no election at all is required for a mere plant extension, unless 10 per cent of the qualified voters so petition, and then a mere majority vote will suffice.[24]

In New Hampshire, the preponderance required varies with the political unit, being two-thirds for towns, but only three-fifths for districts or cities.[25] Missouri is unique in requiring a four-sevenths vote in favor of a project.[26]

Form and content. Concerning the form and content of the bond, one finds the Alabama law defining the provisions that may be made by way of securing the bonds, setting a limit as to the rate of interest that may be paid, specifying a maximum permissible life for the bonds, declaring them to be negotiable instruments, and stipulating that they may be either coupon or registered.

As to the first of these provisions, the Alabama statute declares specifically that the principal and interest of the bonds "*shall be payable solely from the revenues derived from the operation*" of the system.[27] This clause is the most important identification mark of a revenue bond statute. Its inclusion tends to bar the bondholders from a reliance upon funds raised by taxation.[28] Many of the other provisions in a revenue bond statute could be found also in a general obligation statute, but not this one. This restriction as to the source of payment should appear in the bond itself and, in Alabama, the statute so stipulates, thus: "No bond or coupon issued pursuant to this Act shall constitute an indebtedness of such borrower within the meaning of any state constitutional provision or statutory limitation. It shall be plainly stated on the face of each such

[23] California: Stat. (1933), c. 609.
[24] Laws (Spec. Sess. 1933), c. 32.
[25] Laws (1935), c. 113.
[26] Laws (1921), p. 165
[27] Sec. 7. Italics added.
[28] Of course, neither the inclusion of the phrase in the statute, nor in the bond itself, binds the hands of the courts. They may still hold, for one reason or another, that the obligations are, in fact, general obilgation bonds, or even void obligations.

bonds [sic] that the same has been issued under the provisions of this Act and that it does not constitute an indebtedness of such borrower within any state constitutional provision or statutory limitation." [29] The courts have frequently said that some such provision should appear on the face of the bonds in order to avoid fraud upon an innocent purchaser, even if the statute does not so stipulate.[30]

As additional security the Alabama statute provides that "There shall be created in the authorizing ordinance a statutory mortgage lien." [31] The states are divided on this matter of granting a mortgage as additional security. Twelve statutes consulted require that a mortgage be given, seven expressly permit its use, seventeen are silent, while five positively forbid the granting of a mortgage. Three of the latter are the New England states of Connecticut, New Hampshire, and Vermont.

Where a mortgage is allowed, it may provide that the property be permanently alienated from the previous ownership by foreclosure sale, as in Missouri and Wisconsin, or that the sale may entitle the purchaser to use and control for a limited number of years, as in Illinois, or that no sale at all shall take place, as in the Alabama statute mentioned. A limited mortgage of this type does little more than recognize the right of the bondholders to compel the performance by the local officials of their duties, including the setting of sufficient rates, and the collection, segregation, and application of the resulting revenues. All of these points can be covered about as effectively, without the resort to a statutory mortgage, by resolution or by the use of the resolution and a supplemental indenture.

A question which has frequently been raised is whether a mortgage constitutes a necessary or desirable adjunct to the revenue bond. There is considerable opposition to its use. Mr. Henry Cutler, of the Chicago municipal law firm of Chapman and Cutler, has contrasted Texas and Illinois experience, showing that the Texas experience has not been very good despite the use of mortgage backing and that Illinois has operated successfully without relying upon the mortgage.[32] He

[29] Sec. 7.
[30] Kasch *v.* Miller, 104 Ohio St. 281, 291, 135 N. E. 813, 816 (1922). See also McClain *v.* Regents of the University, 124 Ore. 629, 636, 265 P. 412, 414 (1929).
[31] Sec. 8.
[32] *Com. and Fin. Chron.*, CXLV (Oct. 30, 1937), 2884.

argues that ". . . revenue [is] really the sole basis of payment of the bonds."

Similar sentiments are expressed by the municipal bond houses. Some of the New York bond houses argue that while the mortgagees, upon foreclosure (assuming that they bought in the property at the sheriff's sale), might be able to resell a water plant to a private concern that would undertake to operate it, a bridge would be a very difficult enterprise to market. Furthermore, insofar as the security for revenue bonds is real property and therefore not readily movable or easily adapted to other uses, the right to take title and offer the property to others suffers somewhat in comparison to the value of the right where personal property is concerned. Another reason why mortgages are frowned on is that they may weaken the urge upon the part of the debtor to pay the principal and interest, since the debtors, like the farmers in the early 1930's, may tend to consider the debt paid at the time of foreclosure, despite the fact that the purpose of the mortgage is really to support in collateral fashion an independent promise to pay a definite sum of money. As a matter of fact, the Missouri law of 1921,[33] and two Tennessee private acts, [34] explicitly provide that foreclosure shall cancel the debt itself and that no deficiency judgment shall be permitted no matter how small the sum that may be realized by the bondholders from the foreclosed property. Perhaps the most frequently cited objection to the use of the mortgage is the allegation that operation of the enterprise by private interests would subject it to certain costs, such as taxes and miscellaneous expenses, that might previously have been avoided by the borrowing political unit. The argument is made that if the public body fails to make the project pay *with* such advantages, outsiders are even less likely to make the project pay *without* those advantages.

There is also the argument that a mortgage makes the trustee a potential custodian and manager of a project, whereas such an eventuality may not be desirable from the standpoint of either the trustee or the bondholder. In the case of the Kentucky Bridge Revenue loan of 1930, the pertinent statute [35]

[33] Laws (1921), p. 165.
[34] Private Laws (1933), c. 469, sec. 1, and c. 538, sec. 6.
[35] Acts (1928), c. 172, sec. 4.

provided that a statutory mortgage could be given. Nevertheless, the municipal bond house that underwrote the issue voluntarily waived the mortgage, feeling that the use of the mortgage would have thrown on the trustee those duties and responsibilities which were more properly the obligation of the State Highway Commission, the authorized operator of the bridges.

Still another reason why the mortgage might be frowned on is the fact that it covers public property used and useful in the public interest. Mortgage or no mortgage, the courts may compel the devotion of the property to continued service under substantially the previous conditions and thus limit the ability of the purchasers at the foreclosure sale to reap the greatest possible benefit from their acquisition.[36]

How valid these arguments are is not altogether certain. Some of them seem more concerned with the trustees' freedom from care than with the welfare of the bondholders. Furthermore, the argument about the inability of the private acquirers at the foreclosure sale to operate the project successfully if the public body cannot, assumes both efficiency and good intentions on the part of the political entity, or, better, on the part of those in charge of the water system, power plant or other system. A reading of the City of Wagoner case[37] should disabuse anyone of the notion that a municipality will always give a plant good care. In this case the city already owned and operated its own electric plant at a time when a city commissioner was elected who favored the purchasing of electric energy from a private power company. The newly elected commissioner immediately discharged the experienced manager of the municipal plant, and had an inexperienced man put in his place "with the deliberate purpose," the court said, "of creating the impression upon the inhabitants of the City that the Diesel engines were inefficient, expensive to operate and not capable of carrying the rated capacity load specified in the contract." The court further declared that under the inexperienced manager the engines "were negligently, unskillfully and improperly" cared for and operated. Among other things,

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[36] See minority opinion in State *v.* Town of River Junction, 125 Fla. 267, 169 So. 676 (1936).

[37] Fairbanks, Morse and Co. *v.* City of Wagoner, 81 F. 209 (C. C. A. 10th, 1936). All quotations in this paragraph are taken from the report of the case.

nine cylinder heads were cracked in a little over two years.

It seems quite conceivable, therefore, that the public debtor might not always serve the creditor's interests as well as the creditor could if he himself had possession of the property. And if mortgages have been developed and used successfully in other business relationships, in order to increase the security of the creditor's position, is it certain that they add nothing to the security in the case of revenue bonds? If they do add something, is it not possible that the bondholders are in better position if they can foreclose, even if they seldom make use of the power? Life insurance companies for years have made it a practice to take chattel mortgages on livestock and field crops as additional security against delinquent payments of principal and interest, not because they expected to sequester the cattle or grain, but so that they could do so, if the farmer should show bad faith or extreme incompetency in the management of his affairs. The opponents of the use of the mortgage answer such arguments by insisting upon the differences between public and private corporations, and by differentiating as to the remedies appropriate for their respective obligations. But this attitude should not govern any further than absolutely necessary, since it is precisely because revenue bonds are not orthodox public obligations and because they are so largely an adaptation of private corporate practice to the needs of public bodies, that we have here a new type of public obligation. Robert A. Taft has written: "The additional security given by such a mortgage and conditional franchise would seem to be of considerable value, and if the special lien bond is to be developed, I should think that this feature ought to become almost universal." [38]

To return to the main subject with which we are concerned in this chapter, *i.e.*, the substantive content of the revenue bond statute and, more particularly, in this section, the legislative provisions relating to the giving of a mortgage, in some instances the mortgage applies only to the property whose purchase or construction is being financed by the bond issue. But in recent years the tendency has been to try by statute to confer upon the municipality, or other borrowing agency, the right to include property already owned, when extensions or

[38] "A Review of the Special Lien Bond Situation," *Jour. of the Amer. Water Works Assn.*, XXVII (October 1935), 1344.

improvements are to be financed. The right to do this is closely supervised by the courts and will be discussed again in the next chapter.

The second major item in the provisions relating to the security of the bonds has to do with the stipulations as to whether the bonds are to be paid from the gross or from the net earnings. If out of the former, the burden of the operating expenses might conceivably be thrown upon the taxpayers who are not supposed to be affected one way or the other by the issuance of revenue bonds, or else the project might simply be under-maintained or not maintained at all. In the latter case, it would seem evident that the bondholders would do well not to stand on their rights. If the bonds were close to maturity, however, it is conceivable that it might be to the bondholders' interest to insist upon their rights in the gross revenues, even though it might cause the public owner of the project loss through under-maintenance for the time being. Most of the actual revenue bond experience to date seems to indicate that the right to have bonds payable from gross rather than from net income is worthless, unless some provision is made for supplying the operating and maintenance expenses from a source other than the project itself.

The Alabama statute is clear as to the allocation of the revenues. It states in Section 22 that "out of the gross revenues there shall be first set aside a sum sufficient to pay the principal of and the interest upon the bonds as and when the same become due and payable," thus making operating expenses and maintenance distinctly subordinate in rank to debt service.[39] But the other statutes are not always so definite. Arkansas, California, Kansas, and other states simply provide that the principal and interest shall be paid out of "revenue" or "from the revenues." In such states recourse to past court decisions or the bringing of a new test case may be necessary to determine whether, in the particular jurisdiction, the word "revenue" is equivalent to gross receipts or to net receipts. If it should be determined that it was equivalent to gross receipts,

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[39] However, the Alabama Supreme Court, in 1934, ruled (Smith *v.* Guin, 229 Ala. 61, 155 So. 865) that the statute only pledges the gross revenues when and if the *general* funds on hand are sufficient to pay operating expenses and maintenance. If such funds are not sufficient, operating costs and maintenance must be paid out of gross income.

one would still be faced with the question whether the principal and interest were entitled to priority over operating and maintenance expenses, whether they were to share equally with them, or whether they were to be taken care of subsequently. In 14 cases the bonds are payable expressly from net earnings only, while in 12 instances they are to be serviced from all or such part of the revenues as the bond resolution may provide.

Turning to the matter of the permissible life for revenue bonds, the obligations may run anywhere from 20 to 50 years, with 40 years the most common term specified and 30 years a rather poor second. The term should not be too short, lest the project be hard pressed to meet its amortization payments on the principal in addition to its operating expenses and interest. Short-term bonds would tend to force the borrower to charge high rates until it has retired the indebtedness. Such rates would not be fair to the present users. At least one state, New Mexico, lengthened the permissible life of its revenue bonds by amending its original law. The permissible life of the bonds was increased from 20 to 50 years.[40]

Where there is any express stipulation in the statute as to the form of the bonds, the serial type is rather frequently required to the exclusion of term bonds, but equally frequently the matter is left to the discretion of the issuer. In some cases it is provided that the serial payments shall begin within a certain time after completion of the project, usually three years, and that no payment may be more than two and one-half or three times the smallest prior payment.[41] Since a short sequence of untoward events is almost certain to result in serial bond defaults in cases where the payments may be made from a limited fund only, a return to the use of term bonds will be necessary if the use of revenue bonds is to be a success. The necessity is perhaps greatest in the case of unseasoned construction projects, and only slightly less pressing in the case of bridge bonds generally, since unseasonable weather can seriously embarrass a serial bridge issue.[42]

The statutes may expressly provide that the bonds shall be

[40] Laws (1933), c. 57, sec. 3 as amended by Laws (Ex. Sess. 1934), c. 4, sec. 2.

[41] See sec. 7 of the Alabama Act as amended. The size of the payment permitted was increased from the two and one-half times of the original act to three times the smallest prior payment by the 1936–37 amendment.

[42] See Chapter IX, Statutory Authorities, pp. 230–249 for an account of some recent unfortunate experiences with serial bridge bonds.

coupon or registerable at the option of the holder, or may say that the governing body of the issuing unit may use its discretion, or may be silent altogether.

The maximum rate of interest permissible as stated in the statutes is usually 6 per cent. In a much smaller number of cases it is 5 per cent and in one or two instances no limit is named. Whether or not the bonds shall be callable is usually left to the judgment of the issuing body. In all but 11 cases the statutes declare that the bonds shall be negotiable instruments.

Sale provisions. The third main division of the statutes is made up of sections relating to the proper purchasers of the bonds, the nature of the sale, whether public or private, the maximum amounts of bonds allowed to be sold, and the minimum sale prices. Occasionally the bonds are salable only to the United States or an agency thereof. This was true of the early 1933 statutes, notably in California,[43] New York (1935), and Ohio.[44] Such provision reflects the state of mind of the sponsors who thought of the revenue bond merely as an emergency device, and not as a method of financing that would be useful even in the private market. In the later statutes, the PWA, which never had sponsored or desired such a limiting clause, succeeded in having the restriction omitted. Where sale to the United States is not required, the statutes, in slightly over half of the cases where the question is touched on, require that the bonds be publicly offered[45] unless sold to the United States or one of its agencies.

In some cases revenue bonds may be turned over to contractors directly as compensation for their work, thus reflecting their similarity to special assessment obligations which for years have been so marketed. This method of sale had been permitted under the New York canal certificate law of 1851, as an alternative to public sale for cash.[46]

Frequently the statute defines the amount of revenue bonds that may be sold. Under the 1935 New York statute the

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[43] Stat. (1933), c. 609.

[44] Laws (2nd Spec. Sess. 1933), p. 191.

[45] Michigan provides that where the public sale turns out to be a failure the bonds may then be offered at private sale. Pub. Acts (1933), No. 94.

[46] See page 14. For a description of Illinois practice in this regard, see Alex von Praag, Jr. and C. A. Batterskill, "Municipal Ownership in Geneseo," *Ill. Mun. Rev.*, XV (June 1936), 131.

amount is that necessary to pay all construction, engineering, legal, inspection, and fiscal expenses, plus interest charges for a period of six months following completion of the project. Other statutes vary slightly as to the items enumerated. Utah provides that the proceeds of the bond sale may be used to pay interest for three years "from date of bonds." [47] This period may be dangerously short; it takes time to get properties built, connections made, and people accustomed to the new services. In England the Central Electricity Board Act provides that interest shall be paid out of bond proceeds for about seven and one-half years after the date that the money was spent.[48]

The statutes almost universally prescribe a minimum sale price. This varies from a price of 90 per cent of par, to par and accrued interest, the latter being the most common provision. Sometimes the limitation is stated differently, a sale being allowed at any figure, as long as the sale price does not result in a net yield to the purchaser of more than 5 or 6 per cent, as the case may be.

Post-sale provisions. The statutory provisions referring to post-sale matters have to do with custody of the proceeds of the bond sale, custody of the revenues of the project, tax exemption for the bonds, legality of the bonds as investments for savings banks and trustees, requirements as to books of account and their availability to the public, provisions for payment, and remedies in case of nonpayment.

The Alabama statute requires that the governing body, where practicable, shall require that the proceeds of the sale shall be deposited, pending disbursement, in special accounts with banks which are members of the Federal Reserve System, and requires that the banks shall secure the deposits by setting aside United States Government bonds having at least an equal market value.[49] Just as the receipts of the bond sale are required to be segregated pending construction, so, too, the statutes may require that the revenues derived from the finished enterprise be kept in a separate fund. In nearly half of the statutes examined, provision is made either that a special fund for the revenues of the project must be established, or

[47] Acts (Second Spec. Sess. 1933), c. 22, sec. 6.

[48] Wm. A. Robson, editor, *Public Enterprise* (George Allen and Unwin, London, 1937), p. 127.

[49] Sec. 15.

shall be provided "if practicable," [50] or that the resolution or ordinance may so require.

As respects tax exemption, our model statute declares that the bonds and interest are exempt from all state, county, municipal, and other taxation whatsoever, and even requires that the exemption "shall be plainly stated on the face of each bond." [51] Fourteen of the statutes exempt both the principal and interest from taxation to a greater or lesser extent. Nine of the 14 exempt the obligations "from all taxes," while the other five exempt the obligations from all taxes except gift, transfer, and inheritance or estate taxes.

The statute may provide, as it does in this case, that the revenue bonds shall be legal for investment by savings banks.[52] Of course, this sort of provision does not make the bonds legal for savings banks located outside of the state unless the necessary legislation exists in the state where such "foreign" bank is located.

The most important of the provisions relating to payment is that part of the statute having to do with rates. If the rates bring in enough net income to take care of the periodic requirements, questions of priority of successive issues, and of remedies in case of default are not apt to arise; but if they are not adequate, and especially if they cannot be made adequate, resort to the other provisions aiming to make payment possible may well prove futile.

Section 21 of our guiding law provides that rates for service must be fixed prior to the issuance of the bonds, and further requires that "Such rates *shall* be sufficient" [53] to provide for the payment of interest and principal, to create a bond and interest redemption fund, to take care of the administration, operation, and maintenance expenses, to build up a depreciation fund, and to create a reserve for improvements. Should the current receipts prove inadequate, the rates must be revised in an effort to provide the required revenues. Further-

[50] Michigan, Pub. Acts (1933), No. 94. Also Mississippi, Laws (1934), c. 316.
[51] Sec. 13.
[52] Sec. 12.
[53] Italics added. The faith of the legislators that a rate sufficient to meet all requirements can be assured by legislative fiat is touching, especially after the nation's recent street railway experience, in which no rate could be found that would provide a reasonable return on the investment. Only if the public can be compelled to use and pay for the services of the utility is it certain that a revision of the rates can assure an adequate fund for the bondholders.

more, the governing body is ordered to make payments monthly (or oftener, if deemed advisable) to the various funds prescribed in the statute. This latter provision reminds one of the monthly payments that were required of the debtor under some of the real estate mortgage loans extended to owners of large office or apartment buildings.

The Arkansas statute tries to protect the bondholders by stipulating that

> Rates for water fixed precedent to the issuance of bonds shall not be reduced until all of said bonds shall have been fully paid, and may, whenever necessary, be increased in amounts sufficient to provide for the payment of such bonds, both principal and interest, and to provide proper funds for the depreciation account and operation and maintenance charges.[54]

Nebraska merely provides that all rates shall be "just and equitable," while Pennsylvania puts an upper limit on the rates by saying that they shall not be higher than may be necessary to supply the funds as specified and defined by the assembly. North Carolina and New York specifically provide that the utilities financed under the revenue bond acts shall not be operated for profit.

One commonly finds a provision that the entity *may* pay the reasonable value of the services furnished to it by the utility, but the Michigan statute states that the political unit "shall" pay for services received.[55] In addition, the statute provides that such payment shall be made out of current funds or out of the "proceeds of taxes," insofar as such provision is compatible with constitutional and statutory requirements.

Of course, it is the very essence of a revenue bond statute that owners of the bonds shall have no right to require the community to use the proceeds of taxes in servicing the revenue bonds, but the statutes differ as to the right of the municipality to voluntarily contribute tax moneys if it so chooses. The Missouri[56] and Michigan[57] statutes are unusual in expressly stipulating that the community may contribute funds to pay the obligations. In the absence of such a statute a taxpayer might have cause for complaint should the political unit of

[54] Acts (1933), No. 131, sec. 8.
[55] Pub. Acts (1933), No. 94, sec. 18.
[56] Laws (1921), p. 166.
[57] Pub. Acts (1933), No 94, as amended.

which he was a member attempt to support a faltering revenue bond out of funds other than the utility revenues. An Arkansas litigant endeavored to have the supreme court of his state rule that no tax would be levied at any time in the future for purposes of paying obligations which purported to be revenue bonds at the time of issue. The court, however, refused to hand down such a declaratory judgment in advance of an actual attempt by authorities to levy such a tax.[58] The Kansas act is very strict. It reads: "No municipality shall have any right or authority to levy taxes to pay any of the principal of, or interest on, any bonds or any judgment against the issuing municipality on account thereof." [59] The California law is still more forthright: "In no event shall any real or personal property, other than the operating property . . . ever be liable or taxed for any of said bonds or any of the expenses, costs or charges of said district, arising out of the operation, maintenance and administration of any works constructed out of the proceeds of said bonds so issued and *each bond shall contain as a condition thereof this paragraph in full.*" [60] But a later legislature might change its mind as Mississippi's did, in ordering a levy of taxes as additional support for what had been issued as simple revenue bonds.[61] At the same time, the Mississippi legislature stipulated that such bonds, as thus additionally secured, should not be construed to constitute debt within the meaning of any statutory limitation. Since there is no constitutional limitation in Mississippi, this would mean that even tax obligations of municipalities would be exempted from debt computations, unless an unfriendly court should rule otherwise.

Occasionally it is provided that the rates or charges levied shall "constitute a lien upon the premises," as well as an obligation of the owners of the property served, and that the lien may be foreclosed in the same manner as a lien for taxes.[62] This type of clause tends to narrow the gap between revenue bonds and general obligation bonds. The rates tend to become indistinguishable from taxes.

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[58] Ringgold v. Bailey, 193 Ark. 1, 97 S. W. 80 (1936).
[59] Laws (Spec. Sess. 1933), c. 32, sec. 6.
[60] Stat. (1933), c. 609, sec. 6. Italics added.
[61] Laws (Ex. Sess. 1935), c. 63, sec. 3, as amended by Laws (1936), c. 312.
[62] Conn. Gen. Stat. (1931, 1933, 1935 Supp.), c. 33a, sec. 142 c. See also South Carolina (1933), c. 236, sec. 16.

Priority of payment for each issue over any subsequent one may be required as in Tennessee, or left to local discretion as in Arkansas, or forbidden as in Connecticut, where all issues are to share and share alike.

Where an addition is made to an already existing plant, it is rather common to find a setting forth of the way in which the total revenues of the enlarged plant shall be divided for purposes of pledging the additional earnings to secure the bond issue which made the increased earnings possible. The usual method is to provide for an appraisal of the old plant at the time of the new bond issue, and to divide the new aggregate revenues in proportion to the capital values of the old and added plants. Arkansas is a good example of this practice.[63] Utah includes the Arkansas plan but, in addition, authorizes the issuer to use "such other method . . . as the circumstances may require." [64]

In respect to state supervision, Alabama requires that the permission of the Public Works Board must be secured for each issue. In some states it is expressly provided that the political entities shall be exempt from supervision by the State Public Service Commission, in others that they shall be exempt from all supervision except that of the State Board of Health.

As to the remedies available to the bondholders in case of default on principal and interest payments, the statutes usually set these out in more or less complete detail. The permitted remedies include the right to bring a suit at law or in equity and to initiate mandamus proceedings. Sometimes the right to an injunction is mentioned. Most, or all, of these rights would belong to the bondholders apart from the statute, but where the right to a receiver is mentioned, the bondholders' rights are improved, since the courts will seldom appoint a receiver for a public or quasi-public body in the absence of express statutory authority. Twenty-six of the 41 states having revenue bond legislation provide for the appointment of receivers in one or more of their statutes.[65]

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[63] Stat. (1933), c. 131, sec. 10.

[64] Laws (2d Spec. Scss. 1933), c. 22, sec. 3.

[65] The following is believed to be a complete list of all states specifically providing for the appointment of receivers. Only one statutory citation for each state is given·

Alabama—Gen. Acts (1935), c. 154, sec. 6 (g).

Arizona—Laws (3rd Spec. Sess. 1934), c. 9, sec. 9 (a).

Many of the statutes have expiration dates and if not renewed the power to issue revenue bonds may lapse in some states. Where such expiration dates exist they refer almost without exception to a date prior to 1940.

Summary

Hardly any parts of a revenue bond statute, as thus summarized, other than the provisions that the issued bonds are not to be considered an indebtedness, and that the bonds are payable solely from the revenues in the particular fund, are peculiar to revenue bonds. Even the former clause could be inserted in a special assessment bond. It is the occurrence of the two clauses, coupled with the fact that the source of the means of payment lies in the revenues of a quasi-business enterprise, that identifies the statute as a revenue bond statute. As to the providing for the creation of a mortgage, appointment of a receiver, the segregation of funds, and all the remaining sections, they can and have appeared in connection with the further securing of tax obligations.

The only substantial difference between a revenue bond act

Arkansas—Acts (1933), No. 131, sec. 7.
California—Stat: (1933), c. 609, sec. 7 provides . . . court may . . . appoint an elective or appointive officer . . . to carry out any order which the court may make. . . .
Colorado—Laws (1937), c. 217, sec. 13 (relates to revenue bonds issued by state boards).
Connecticut—Gen. Stat. (Cum. Supp. 1931, 1933, 1935), c. 33a, sec. 146 c.
Florida—Laws (1935), c 17174, sec. 15 (a).
Georgia—Laws (1937), No. 513, sec. 8.
Illinois—Laws (1935), p. 298, sec. 6.
Indiana—Acts (1932), c. 61, sec. 20.
Kentucky—Acts (Spec. Sess. 1934), c. 15, sec. 7.
Michigan—Acts (1931), No 316, sec. 17.
Mississippi—Laws (1934), c. 317, sec. 5.
Missouri—Laws (1921), p. 165, sec. 3.
Montana—Laws (1935), c. 141, sec. 6 (h).
Nevada—Laws (1937), c. 109, sec. 9.
New Hampshire—Laws (1935), c. 113, sec. 19 I
New York—Laws (1935), c. 525, sec. 405 (h).
North Carolina—Pub. Laws (1935), c. 473, sec. 6 (h).
North Dakota—Laws (1933), c. 179, sec. 4.
South Carolina—Acts (1933), No. 299, sec. 10.
South Dakota—Sess. Laws (1935), c. 163, sec. 6 (h).
Tennessee—Pub. Laws (1933), c. 68, sec. 18; Pub. Laws (Spec. Sess. 1935), c. 33, sec. 6 (h).
Washington—Laws Ex. Sess. 1933), c. 18, sec. 9.
West Virginia—Acts (1935), c. 68, sec. 22.
Wisconsin—Stat. (1933), sec. 66.06 (9)(b) 2.

and the ordinary, general obligation, enabling act as a Tennessee court saw it, was that:

(a) the revenue obligations were not general obligations but were secured by a lien on the physical property, and were to be paid out of the revenues derived from the operation of the plant,
(b) were possibly to be transferred to the RFC or other governmental agency rather than marketed in the ordinary channels, and
(c) a receiver might be appointed.[66]

The inclusion of the second and third points of contrast is only justified on the ground that the court is differentiating between the revenue bond statute and the *ordinary* general obligation enabling act, since both of the last two features could be coupled with general obligation financing.

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[66] Town of Selmer *v.* Allen, 166 Tenn. 476, 63 S. W. (2d) 663 (1933).

CHAPTER III

Revenue Bonds and the Courts

EXAMINATION of the constitution and statutes of those states that authorize the use of revenue bonds is only the first step towards discovering the current legal status of revenue bonds. The voters may amend their constitutions and the legislators pass session laws, but the courts have the last word as to the meaning to be attached to phrases in the constitutions, and as to the propriety of the statutes.

Authority To Engage in Proprietary Activities and To Issue Bonds

Since revenue bonds are merely a means of financing governmental or proprietary activities of a public body, one should first determine the entity's authority to engage in the contemplated enterprise. The general status of the Federal government and of the states in this regard was recently summed up by Justice Roberts in the AAA case as follows: "The federal union is a government of delegated powers. It has only such as are expressly conferred upon it and such as are reasonably to be implied from those granted"; and again, "Each State has all governmental powers save such as the people, by their Constitution, have conferred upon the United States, denied to the States, or reserved to themselves."[1]

Although at first sight Justice Roberts' statements may make it appear that the Federal government has rather limited powers, the Federal government has found authority for engaging in almost any activity that it wished[2] by resorting to

[1] United States *v.* Butler, 297 U. S. 1, 63 (1936).

[2] See Ford P. Hall, *Government and Business* (McGraw-Hill Book Co., Inc., New York, 1934), pp. 15–18; Dexter M. Keezer and Stacy May, *The Public Control of Business* (Harper and Brothers, New York, 1930), pp. 184–196; and

such passages in the Constitution as those relating to the taxing power, the regulation of commerce, and the power to borrow money, and by relying upon the "implied powers" doctrine as enunciated in the McCulloch *v.* Maryland case.[3] In only 62 instances arising out of more than 24,300 laws enacted by Congress over a period of 146 years had the Supreme Court, up to 1936, held any Congressional legislation to be unconstitutional.[4] Even more to the point is the fact that the Supreme Court had not found in a single instance, prior to 1934, that the Government was spending money illegally.[5]

States. But the states, too, as sovereign bodies, have broad powers of engaging in private enterprise, within those limitations (apparently not very severe) referred to by Justice Roberts above. Chief Justice Taft declared by way of dictum in the Court of Industrial Relations case in 1923 that the state may engage "in almost any private business if the legislature thinks the State's engagement in it will help the general public and is willing to pay the cost of the plant and incur the expense of operation." [6]

Nevertheless, even if a state has the power to engage in a proprietary activity, it may still be under constitutional restrictions as to the amount of debt that can be incurred. These restrictions were, for the most part, written into the state constitutions in the pre-Civil War era as a result of unfortunate experiences with state capitalism.[7] The constitutions of 17 states prohibit the incurring of state debt except for certain stipulated purposes, and most of the remaining states may borrow only up to specified amounts.[8]

Accordingly, where the states have exhausted their power

Edward S. Corwin, *The Twilight of the Supreme Court* (Yale University Press, New Haven, 1934), p. 179. Professor Corwin speaks of the national government's "power to go into any business whatsoever."

[3] 4 Wheat. 316 (1819).

[4] *The United States News,* Jan. 20, 1936, p. 1.

[5] Corwin, *op cit.*, p 174 ff. However, the AAA decision of 1936 disapproved of the way in which the Federal government was raising and spending money. The still later Alabama Power Co. and Duke Power Co. cases (see pp. 184–185) may be looked upon as upholding the Federal government's spending power.

[6] Wolff Packing Co. *v* Court of Industrial Relations, 262 U. S. 533, 537 (1923). A leading case pointing in the same direction is Green *v.* Frazier, 253 U. S. 233 (1920).

[7] See William J. Shultz, "Limitations on State and Local Borrowing Powers," *Ann. of the Amer. Acad.,* CLXXXI (September 1935), 118.

[8] *Ibid.*, p. 119.

to borrow on their general credit, the opportunity to use revenue bonds presents itself and may make possible the acquisition of some beneficial and even profitable projects that might otherwise be unobtainable.

E. H. Foley, Jr., formerly director of the legal division of the PWA, has shown that the courts have frequently not required the states, or their subdivisions, to show express authority in order to issue revenue bonds.[9] In some jurisdictions the courts, having in mind the fact that the constitutional provision against the incurring of debt was adopted to protect those who paid taxes on real estate, have gone so far as to hold that those state obligations payable out of excise taxes, or from fees, were not debts within the meaning of the constitutional limitations on state indebtedness. This has been exemplified in New Mexico in connection with a pledge of fees to be charged upon civil actions that are begun in the various district courts of the state. The same conclusion was reached in Colorado and Kansas where revenue anticipation warrants were to be paid from excise taxes on gasoline sales, and in Oregon and Washington where the pledge was one of "liquor license fees, penalties, forfeitures and income and revenues received under a state liquor control act."[10]

South Carolina has gone farthest of all by declaring that obligations payable in the first instance out of excise taxes, but also backed by the full faith, credit, and taxing power of the state, are not debts within the meaning of the constitution.[11]

But if such obligations are not "debts," then state revenue bonds are much more logically declared not to constitute debt, since they are not payable out of taxes at all. Furthermore, the revenue bonds involve a much closer connection between those who use the resulting project and those who are subjected to the charges than is true of the loans that are supported by excise taxes.

Foley cites the successful use of revenue bonds by Kentucky and West Virginia for toll bridge purposes, by Oklahoma, Oregon, Montana, and North Dakota for dormitories, by Kentucky and Montana for sanitoriums, by Montana and Ohio

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[9] "Low Rent Housing and State Financing," 85 *U. of Pa. Law Rev.* 239, 250 (January 1937); see the footnote, especially.

[10] *Ibid.*, p. 243.

[11] *Ibid.*

for water conservation projects, and by Colorado for canals.[12]

Idaho is a particularly good example of the preferred position occupied by state revenue bonds. Whereas the state supreme court has declared unconstitutional the attempts of the legislature to confer upon the state's political subdivisions the power to sell revenue bonds, the court has approved a state law that is designed to permit the financing of state educational facilities by the use of revenue bonds.[13]

Thus there seems to be little to prevent a larger and larger use of revenue bonds on the part of states as a means of financing their revenue producing undertakings.

Municipalities. While the Federal and state governments have broad powers to engage in the so-called proprietary enterprises, often without any changes in their respective constitutions, the situation is different regarding the municipalities and their powers. Municipalities have only such powers as are expressly given to them or as are fairly and necessarily to be implied from the powers which are expressly granted to them by their creators, the states. Consequently, they need express or implied authority if they are to provide public utility services, and whereas the powers of the sovereign bodies will be broadly construed and the benefit of the doubt extended to them, the municipalities will have their powers strictly construed and, in case of doubt, have the disputed power denied to them.[14]

However, the mere statement that a municipality has express and implied powers does not define very closely the possible scope of the local unit's activities. The courts have to determine in individual instances whether the power that the political unit wishes to exercise is in fact implied. Most of the proprietary activities are outgrowths of the exercise of the municipalities' "police power," and the activities that may properly be included in that term are variously understood by different courts, and by the same courts at different times.

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[12] *Ibid.*, p. 251.

[13] State *ex rel.* Miller *v.* State Board of Education, 56 Ida. 722, 52 P. (2d) 141 (1935).

[14] For a standard treatment of the powers of municipalities in respect to proprietary activities see Eugene McQuillin, *The Law of Municipal Corporations.* Seven vol. (Callaghan and Co., Chicago, 1928), c. 35 (Vol. 6 revised, 1936).

Even after it has been determined that the political unit in question has the power to operate a public utility enterprise, it does not necessarily follow that the entity has the right to incur debt for the purpose of financing the project, or, if it does have the power to incur the debt, that it has authority to borrow money, or, granted that it has the authority to borrow money, that it has the right to issue bonds. Even if the public body has the power to issue bonds, it still may not have the power to issue revenue bonds.

We have seen that, in the last analysis, the entity's power to engage in proprietary activities (for that matter, its power to do anything) is dependent upon some express authority. For no power can be implied, unless at some point there exists express authority to which it can be related.

Since a municipality is dependent for its power upon some express (or implied) grant of authority, it goes without saying that a municipality has no inherent power to borrow money. The courts have been inclined to be lenient, however, and have frequently held that the existence of the authority is implied by the statutory granting of other powers, especially if their exercise requires the borrowing of money.

Similarly, a municipality has no inherent authority to issue bonds. Except in the five states which give the authority directly through their constitutions, there must be statutory authority of some kind.[15] And here the courts as a whole are somewhat less lenient in permitting the municipalities to claim that the authority is implied as a necessary device to effectuate the objectives for which the political subdivisions have express grants of power, than they have been in regard to the power merely to borrow. McQuillin states that "the general rule is that there is no authority to issue bonds unless it has been expressly conferred."[16]

Likewise, the general rule, or at least the better rule, would seem to be that there is no authority to issue revenue bonds

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[15] Leonard A. Jones, *The Law of Bonds and Bond Securities* (The Bobbs-Merrill Co., Indianapolis, 4th ed, 1935), vol. I, pp. 13, 19, 21, and 22. The five states are California, Nebraska, Ohio, Oklahoma, and Oregon. But see, in regard to Minnesota, C. C. Ludwig, "Water Works—Financing and Rates," *Jour. of the Amer. Water Works Assn.*, XXIX (May 1937), 630, which indicates that home rule charters in that state sometimes provide for "limited obligation or mortgage bonds."

[16] *Op. cit.*, sec. 2436.

unless the power has been expressly conferred.[17] Historically there have been numerous exceptions to this rule. The first issue of revenue bonds, that by Spokane, has been shown to have been issued in the absence of statutory legislation, and Pershing, in his article on revenue bond remedies, cites similar instances in Utah, Georgia, and Colorado.[18] The fact that Colorado was a home rule state at the time of the issue makes the last named instance less significant than it would be if the home rule principle had not prevailed. In South Carolina, Charleston was allowed to pledge the net revenue from an undertaking, in addition to a pledge of its tax power, despite the lack of express authority,[19] and at a time when Kentucky had revenue bond statutes permitting the issuance of water and sewage revenue obligations but no statute expressly naming gas revenue bonds, the court upheld the right of a city to issue the same where it had authority to construct and maintain a gas plant.[20] Despite these instances, it is safer for the city to have available an express statute than to be dependent upon the courts for a declaration of powers that may be implied from some statute more or less distantly related to the right which the community wishes to exercise.

But how can the state confer the power? Here the major role that is played by the courts in the contemporary revenue bond development becomes apparent. The domestic revenue bond institution depends very largely upon the willingness of the courts to declare that such bonds are not indebtedness within the meaning of the constitutional provisions that limit the rights of the state subdivisions to incur debt. The legislatures could pass statute after statute, but they would all be as ineffective as those of Idaho have been if the courts of the other states were to decide the cases from the point of view adopted by the Idaho court.[21] If the courts were to change their interpretation of the words "debt" or "indebtedness" to

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[17] Fairbanks, Morse and Co. *v.* City of Wagoner, 86 Fed. (2d) 288 (C. C. A. 10th, 1936).

[18] John Pershing, "Revenue Bond Remedies," 22 *Cornell Law Quar.* 66 ff. (December 1936).

[19] Simons *v.* City Council of Charleston, 181 S. C. 353, 187 S. E. 545 (1936).

[20] R. F. C. *v.* City of Richmond, 249 Ky. 787, 61 S. W. (2d) 631 (1933). Similarly, electric revenue bonds were upheld in the case of Kitchens *v.* City of Paragould, 192 Ark. 271, 90 S. W. (2d) 761 (1936), although the revenue bond statutes mentioned only water and sewage projects.

[21] See p. 47, and cases listed under Idaho in Appendix B.

include revenue bonds, nothing short of constitutional amendments could preserve the use of revenue bonds in the 16 states [22] where a tax must be imposed at the time that an "indebtedness" is incurred, and only a limited use would be possible in those 30 states [23] whose constitutions prescribe municipal debt limits.

The character of the constitutional provisions referred to is typified by the following excerpt from the Wisconsin Constitution, Art. 11, sec. 3: "No county, city, town, village, school district or other municipal corporation shall be allowed to become indebted in any manner or for any purpose in the aggregate exceeding five per centum on the value of the taxable property therein, to be ascertained by the last assessment for state and county taxes previous to the incurring of such indebtedness. Any county, city, town, village, school district or other municipal corporation incurring any indebtedness as aforesaid, shall, before or at the time of doing so, provide for the collection of a direct annual tax sufficient to pay the interest on such debt as it falls due, and also to pay and discharge the principal thereof."

Fortunately, there is no reason to think that the courts will come to hold the view that revenue bonds are debts within the meaning of the applicable constitutional provisions. As a matter of fact, the tendency is all the other way. Starting with what has been called a restricted special fund theory that declared revenue bonds to be indebtedness if any of the pledged income was derived from property not acquired as a result of the revenue bond financing, the courts have tended to become more lenient until they now, as a rule, permit the revenue bonds to be excluded from debt computations even though they may be payable from revenue derivable in part from a project previously owned.[24] The broad special fund doctrine or simply the special fund doctrine, as distinguished from the

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[22] See Table VIII in *The Municipal Yearbook: 1936*, p. 319

[23] E. H. Foley, Jr., "Some Recent Developments in the Law Relating to Municipal Financing of Public Works," 4 *Fordham Law Rev.* 13, 28, note 72 (January 1935).

[24] C. D. Williams and P. R. Nehemkis, Jr., in an article entitled "Municipal Improvements as Affected by Constitutional Debt Limitations," 37 *Columbia Law Rev.* 177, 209 (February 1937) have classified the states into six groups according to the attitude of their highest courts toward the special fund doctrine, when applied to municipal obligations, as follows:

1. States which have accepted the special fund doctrine and have specifically considered and rejected the restricted special fund doctrine. (Arizona,

restricted special fund doctrine, is the name given to this newer line of decisions. At present there are only two states that still follow the restricted special fund doctrine [25]—Utah and South Dakota.

The Special Fund Doctrine

The justification for the prevailing doctrine that bonds payable out of a special fund are not "debts" lies in the historical background of the constitutional provisions relating to indebtedness. They were enacted to protect the taxpayer from extreme burdens in the way of debt service charges. If it can be shown that a contractual obligation on the part of a municipality will impose no burden upon the taxpayer and is to be met solely from funds otherwise realized, the constitutional provisions are properly held to be irrelevant.[26] The same point of view has long exempted bonds payable solely from special assessments.

While Idaho [27] and New York [28] courts have held that obligations payable solely out of a special fund are "indebtedness," Jones, in his *Bonds and Bond Securities,* says: "The prepon-

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Colorado, Florida, Illinois, Indiana, Kentucky, Missouri, Montana, New Mexico, South Carolina.)

2. States which have accepted the special fund doctrine and in application have disregarded the restricted special fund doctrine but without express consideration of it. (Arkansas, Iowa, Nebraska, New York, North Dakota, Oregon, Texas, Washington.)

3. States which have accepted the special fund doctrine but in application have not yet had occasion to follow or to disregard the restricted special fund theory. (Michigan, West Virginia.)

4. States which have held that the general obligations of a special public corporation secured in part by the pledge of revenues of property of a municipality do not constitute debt of that municipality or county—a form of the special fund doctrine. (California, New York, North Carolina, Pennsylvania.)

5 States which still follow the restricted special fund theory. (South Dakota, Utah)

6. States which reject the special fund doctrine altogether. (Georgia, Idaho, Maryland.)

As applied to the obligations of states and state agencies, states which have accepted the special fund doctrine are Kansas, Louisiana, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, West Virginia, and Wyoming.

States which have rejected the special fund doctrine as applied to the state and state agencies are New Jersey and New York.

[25] *Ibid.*

[26] See application of principle to state obligations in State of Kansas *ex rel.* Boynton *v.* Kansas State Highway Commission, 138 Kan. 913, 28 P. (2d) 770, 139 Kan. 391, 32 P. (2d) 493 (1934).

[27] Feil *v.* Coeur d'Alene, 23 Ida. 32, 129 P. 643 (1912).

[28] Rodman *v.* Munson, 13 Barb. (N. Y. S. Ct.) 63 (1852).

derance of decisions, in numbers and in logic, indicates decisively that the weight of authority, and certainly the modern tendency is to look upon such contracts as imposing no additional financial burden upon a municipality and no additional taxes upon the taxpayer. . . . If there is no obligation to pay, then no indebtedness is created, and the cost or purchase price of the utility is not to be included in the aggregate of municipal indebtedness in reference to debt limitations." [29]

"Feeding the fund." Only so long as the credit of the municipality is not in any way pledged, however, will the obligations that are issued be held not to incur indebtedness within the meaning of the constitutional limitations. "If the creditor can compel the city to pay the indebtedness in some other way than by the special fund created from revenue of the property acquired, there is an indebtedness within the meaning of the constitutional debt limit provision." [30] Thus, what is sometimes called "feeding the fund" is generally forbidden.[31] But just what sort of a promise by the municipality constitutes a feeding or potential feeding of the fund is not a simple question. Payments of operating expenses by the municipality, payment for service rendered to the municipality by the utility, a promise to establish and collect such rates as will prove sufficient to meet debt requirements, and pledges of income from property already owned might all be considered to border on the forbidden feeding of the fund.[32]

In the states of Washington,[33] Alabama,[34] and Missouri,[35] the gross income, or a fixed amount thereof, may be directly or contingently pledged, even though such pledge may result in throwing the burden of operating expenses on the municipality. Such an arrangement, even if permitted, is contrary to the revenue bond theory which is bottomed on the idea of fully self-supporting enterprises.

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[29] Sec. 108. For collection of supporting cases see *Ibid.*, note 23. To the same effect see 72 American Law Reports, Annotated (hereafter cited as A. L. R.) 688, and for list of cases 96 A. L. R. 1385.

[30] 72 A. L. R. 691. In what follows I have relied for the most part upon the two annotations listed in the previous note.

[31] See C. D. Williams, etc., *op. cit.*, p. 198.

[32] See summary of situation in Foley, "Revenue Financing of Public Enterprises," 35 *Mich. Law Rev.* 1, 26 ff. (November 1936).

[33] Twichell *v.* City of Seattle, 106 Wash. 32, 179 P. 127 (1919).

[34] Bankhead *v.* Town of Sulligent, 229 Ala. 45, 155 So. 869 (1934).

[35] State *ex rel.* Hannibal *v.* Smith, 335 Mo. 825, 74 S. W. (2d) 367 (1934).

The state courts are divided on the question as to whether a municipality may undertake to pay for services rendered to it by the municipal utility without incurring indebtedness. The argument against such payments is that since they will probably be made from the proceeds of taxes, any securities issued become, indirectly, at least, tax obligations, and therefore debts.[36] In the case of Fairbanks, Morse and Co. *v.* City of Wagoner,[37] the court said that the city could pay for the electricity furnished to the city's water utility out of any water utility earnings available, but not from funds derived directly or indirectly from taxation. In general, the courts state that the prohibition, where it exists, refers to payments at the regular rates including profits; but would the case be different if no profit were involved? And suppose a municipality already owned its plant, and was habitually paying for service rendered, would it have to cease making such payments if it sold revenue bonds for purposes of enlarging the plant?

On the other hand, payment by the community at regular rates was permitted in Kentucky, but the court held that the debtor city was not thereby authorized to bind itself precisely as to the net amount to be paid, nor could the arrangement involve a burden upon the taxpayer where formerly the service was furnished free.[38] If the payments made do not exceed those that would be made by the city if the financing had been done with general obligation bonds, or, perhaps, than would be made if the service were rendered by a private company, it is hard to see that any extra burden would fall upon the taxpayer as the result of the use of revenue bonds.

If the municipality covenants to establish and collect rates sufficient to meet the payments of principal and interest, some courts hold that such action renders the city liable for fulfillment of the promise and thus creates a debt.[39] On the other hand, the Colorado, Kentucky, Utah, and Washington courts permit such agreements.[40] Sometimes the rates are restricted to being no higher than those presently charged; at other

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[36] Hight *v.* Harrisonville, 328 Mo. 549, 41 S. W. (2d) 155 (1931).

[37] Fairbanks, Morse and Co. *v.* City of Wagoner, Okla., 81 Fed. (2d) 209 (1936).

[38] Williams *v.* City of Raceland, 245 Ky. 212, 53 S. W. (2d) 370 (1932).

[39] Feil *v.* City of Coeur d'Alene, 23 Ida. 32, 129 P. 643 (1912).

[40] 72 A. L. R. 687, 694.

times, to "reasonable" rates.[41] The approving courts hold that a covenant respecting the rates to be charged is not a promise to pay money and therefore cannot create a debt, even if the municipality should fail to live up to its promises. The proper remedy, should the authorities fail to maintain the promised rates, would not be an action on a contract for money payment but mandamus proceedings to compel specific performance of the promise.

Again, the states are divided on the question of whether the pledging of income derived from property, other than or in addition to that purchased, creates a debt. Colorado (if profits formerly available to pay running expenses of the municipality are not diverted), Florida, Illinois (since Maffitt *v.* City of Decatur)[42], Indiana, New Mexico, North Dakota, and South Carolina permit the combination of earnings from old and new property. On the other hand, the courts of Alabama, California, Texas, Utah, and the Eighth and Tenth Federal Circuit courts will not permit the pledging of the net revenues of an entire enterprise where part of the plant is not the result of the contemplated bond issue. These courts hold that such a pledge leads towards the forbidden practice of "feeding the fund." [43]

Taking a cue from the Joliet case,[44] in which it was held that existing revenues could not be pledged, the cities of Fayette, Missouri, and Wagoner, Oklahoma, provided that additions to their electric light plants should be financed from those portions of the plant earnings that represented the savings in the costs of electricity resulting from the added engines and machinery. In West Virginia the statute formerly required the appraisal of the old and new system and a corresponding division of the revenues, but the state has now adopted the broad special fund doctrine; [45] as a result, all the revenues of the plant, both old and new, are now available for revenue bond service.

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[41] The courts will not allow "unreasonable" rates to be charged, even in the absence of legislative prohibition, and municipalities are in no different position in this respect than are private corporations. See Simons *v.* City Council of Charleston, 181 S. C. 353, 187 S. E. 545, 547 (1936).

[42] 322 Ill. 82, 152 N. E. 602 (1926).

[43] 96 A. L. R. 1393 ff.

[44] City of Joliet *v.* Alexander, 194 Ill. 457, 62 N. E. 861 (1902).

[45] Casto *v.* Town of Ripley, 114 W. Va. 668, 173 S. E. 886 (1934).

In a few instances the courts have upheld revenue bond issues although an incident feeding of the fund caused a drain upon sources quite unrelated to the project being financed. Thus, in South Carolina, the pledging of revenue from a waterworks was held not to create an indebtedness although 90 per cent of the proceeds were to be used for the construction of sewers.[46] And recently Corpus Christi, Texas, borrowed on the revenues of the gas plant in order to rehabilitate its water system. The South Carolina Supreme Court has gone so far as to hold that an obligation is not a debt when payable in the first instance from miscellaneous income, including taxes other than those on real estate, even though, in case of a shortage of funds, the obligations would be payable from real estate taxes. The South Carolina court's only requirement is that at the time of issuance it must appear unlikely that there will be such shortage.[47]

Even though there is no intention to feed the fund, some courts will declare the supposed revenue bonds to be "indebtedness" where there is a possibility that feeding may occur. In the Florida case of Kathleen Citrus Land Co. *v.* City of Lakeland,[48] the court held that the sewage system once completed would impose on the city "a coercive moral if not governmental duty to maintain it," even to the extent that the city might be expected to resort to taxation, if necessary, in order to preserve the system. The court therefore required that an election be held, as if the proposed issue were a general obligation offering. The Florida courts apply this doctrine of "coercion" to new enterprises only, while allowing revenue bonds to be issued against additions to plants. The reverse of this attitude is taken by the courts in those states that adhere to the restricted special fund theory, as Foley points out.[49]

The Mortgage

It would seem that the use of a mortgage should not render revenue bonds "debts" if they are in the nature of purchase money mortgages, and the constitutions and statutes of many

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[46] Roach *v.* City of Columbia, 172 S. C. 478, 174 S. E. 461 (1934).
[47] Briggs *v.* Greenville Co , 137 S. C. 288, 135 S. E. 153 (1926).
[48] 124 Fla. 659, 169 So. 356 (1936).
[49] "Revenue Financing of Public Enterprises," 35 *Mich. Law Rev.* 1, 26 (November 1936).

states, as shown in the last chapter, do authorize the use of the mortgage. However, a Pennsylvania court once ruled that the use of a purchase money mortgage made revenue bonds an indebtedness. The decision was based on the assumption that the property would be lost if payment were not made,[50] and that the taxpayers were being subjected to a potential demand for funds, as a result of the giving of the purchase money mortgage. The Pennsylvania decision was an early one and may be looked upon as contrary to the general rule. Illinois, Indiana, North Carolina, and Wisconsin have always permitted mortgages of a purchase money nature.

Mortgages on already acquired property, in addition to that to be acquired, were not permissible in the early days of revenue bonds, but the Joliet rule has been somewhat relaxed in City of Jerseyville *v.* Connett,[51] where the court held that a statutory mortgage which in no case would give more than temporary custody of the plant to the creditors was permissible. The Wisconsin rule, as laid down in 1921, was similar to the early Illinois rule, but it, too, has been changed, in this case by constitutional amendment in 1932.[52] The possibility of coercion still bothers the courts, however, and where they think that the taxpayers might contribute funds to prevent the loss of property previously owned free and clear, but now mortgaged as additional security to protect revenue bonds, they are likely to hold that the bonds constitute "debt" within the meaning of the limitation. The pledge of a franchise in case foreclosure became necessary rendered revenue bonds an indebtedness in Illinois, but not in Ohio. The former was a municipal, the latter, a state case.[53]

The American Law Reports, Annotated, summarizes the situation, substantially, in the following manner. Where the purchase of property is to be paid for solely out of the income or profits from the property that is being acquired, no indebtedness is incurred within the meaning of the constitutional or statutory limitations. The right of the public body to pay the established rates for service furnished to it is doubtful, the

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[50] Lesser *v.* Warren Borough, 237 Pa. 501, 85 Atl. 839 (1912). Also Feil *v.* Coeur d'Alene; see Footnote 27.

[51] 49 F. (2d) 246 (C. C. A. 7th, 1931).

[52] State *ex. rel.* Morgan *v.* City of Portage, 174 Wis. 588, 184 N. W. 376 (1921). Const. Art. XI, sec. 3, as amended.

[53] 72 A. L. R. 700f.

decisions not being uniform, but the courts are tending more and more to hold that the right to agree to establish and maintain rates sufficient to pay the purchase price does not give rise to an indebtedness, as long as no monetary liability is assumed. The weight of authority is to the effect that revenue of already owned property may be pledged in addition to revenue from the property to be acquired. A mortgage on property that is being acquired is permissible, but if the mortgage covers property already owned, as well as property that is being acquired, it will create a constitutional indebtedness.[54]

Revenue Bond Remedies

While the power to issue revenue bonds has been rather well defined in the various jurisdictions, there has been a conspicuous lack of development of the remedies available to owners of revenue bonds.[55] This failure of revenue bond remedial law to develop as fast as did the remedial law in the "regular" bond field may be attributable to the much smaller volume of revenue bond financing (the use being comparatively slight until 1933), and also quite possibly to the good record of the revenue bonds which were sold.

The remedies available to the holder of defaulted general obligation bonds are of two kinds: remedies at law and remedies in equity. Remedies in equity are usually unavailable until remedies at law have been exhausted. The proper procedure at law in the state courts, and the necessary procedure in the Federal courts, is to commence by securing a judgment for the defaulted amount.[56] The next step is to secure a writ of execution directing the proper official of the public body to seize any available property of the defaulter and, if necessary, to sell it. By such a course of action the holder of the judgment may recover the funds originally advanced. The trouble with this remedy, however, is that there is seldom much property "available." Had the public body any unpledged spare cash, presumably it would have paid the matured obligation.

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[54] Résumés at 72 A. L. R. 701 and 96 A. L. R. 1399.

[55] See John Pershing, "Revenue Bond Remedies," 22 *Cornell Law Quar.* 64 ff. (December 1936).

[56] Leonard A. Jones, *The Law of Bonds and Bond Securities* (The Bobbs-Merrill Co., Indianapolis, 4th ed., 1935), Vol. I, p. 523.

As to its other property, the rule in every jurisdiction is that "property of a public corporation presently devoted to a public use and appropriate to that end is free from execution." [57] The courts have been strongly inclined to include almost all publicly owned property as being for public use.

If the writ of execution is returned unsatisfied the next step is to get a writ of mandamus ordering the officials to do that which they are duty bound to do by law. That which they should do without court order, but which they may refrain from doing until ordered so to do, is to levy a tax. This is by far the most effective remedy for the general obligation bondholder.

Should the difficulty be that the city officials are doing something that they should not do, rather than not doing something that they should do, the courts of equity may be available to the bondholder, and he may secure an injunction to restrain the complained of action. But a receiver will not be appointed in equity courts in the absence of express statutory authority.[58]

In searching out the remedies that are applicable to revenue bonds, one should start with the pertinent constitutional and statutory provisions, if any, and go on to the local charter rights of the public body to covenant, and then investigate the contractual terms of the particular issue, as disclosed by the bond ordinance or resolution. At all stages one needs to consult the appropriate court decisions as to the validity and meaning of the relevant provisions.[59]

Some of the revenue bond statutes, more especially the later ones, have designated the exact remedies that shall be available to the bondholders. Only when these remedies have been tested by the courts, however, will the bondholder be certain as to the force of his remedies. In the absence of express statutory remedies the status of the revenue bondholder is uncertain as the law stands today. In such cases the courts, starting with the terms of the bond contract, will have to develop a

[57] Jeff B. Fordham, "Methods of Enforcing Satisfaction of Obligations of Public Corporations," 33 *Columbia Law Rev.* 28, 29 (January 1933). Jones (*op. cit.*, p. 518) states the case even more strongly, saying that the conceded rule is that "the property belonging to a municipality can not be subjected to execution."

[58] Fordham, *op. cit.*, p. 53. For an extended general discussion of municipal bondholders' remedies, see A. M. Hillhouse, *Municipal Bonds* (Prentice-Hall, Inc., New York, 1936), Chap. X.

[59] Jones, *op. cit.*, sec. 30.

body of common law remedies, probably by analogy. Special assessment bond remedies may well be used as a natural starting point.

An examination of the remedies expressly named in the revenue bond enabling statutes of 41 states discloses that the legislatures have expressly granted, in one or more instances, the right (1) to have a writ of mandamus issued, or (2) to have a trustee or receiver appointed, or (3) to have an injunction, or (4) to receive an accounting, or (5) to foreclose an accompanying mortgage. Sometimes the statutes specifically authorize seizure and sale under certain circumstances, or acknowledge the bondholders' rights to bring "suit or action." Occasionally the statute merely says that the local body may expressly provide for one or more of the above mentioned remedies, if it deems such action desirable.

Of the remedies cited, the most frequently mentioned is the right to the writ of mandamus—21 times. A receiver is appointable under 18 of the 41 statutes examined.[60] The other remedies named occur less frequently but might be available under the blanket term "or other appropriate suit," or if granted under the authorization by the statute to the local body to contract as it wishes.

Mandamus. As the writ of mandamus is ordinarily issued only to enforce a statute, this remedy will be lacking where the support of the revenue bond is mostly by way of contract. Where the authorizing statute provides that such rates shall be set as will result in the receipt of specified sums, Robert A. Taft thinks that the remedy of mandamus to compel a setting of such rates will prove to be a sufficient remedy, provided the utility in question is a water system. He is more dubious in respect to all other types of utilities.[61] He goes on to say that he does not know of a single instance in which the courts have actually ordered the officials to change the rates, nor is a single case known to the writer where the courts have even been asked to issue such an order. Discouragement upon the part of the security holders as a result of the default, their lack of organization, the expense involved, ignorance of what

[60] Receivers are actually permitted in at least 26 states, as shown on p. 41, Footnote 65. The figures as given here show the relative frequencies as found in a sample.

[61] Robert A. Taft, "A Review of the Special Lien Bond Situation," *Jour. of the Amer. Water Works Assn.*, XXVII (October 1935), 1347.

rates should be charged, and the disadvantageous aspects of antagonizing the local officials, all combine to explain why that which appears to be an impressive remedy while the enterprise is prospering is almost ignored after the default.

Because it is almost certain that failures to collect the agreed charges will occur in the future, and that diversions of pledged and collected funds will not be unknown, Pershing advocates the use of the trust indenture in order to make less subject to argument the duties of the local officials.[62] The right of mandamus in connection with the trust indenture will be more certainly available if the trust indenture is based on a statutory provision than if it is merely a part of the contract. The use of the trustee device would also enable the bondholders to receive, through their trustee, information by way of a periodical accounting. The receipt of this frequent information might enable the bondholders to act promptly enough to forestall a plea of estoppel, which might otherwise be made, and accepted by the court on account of dilatory conduct.

Receiver. Insofar as the income of a revenue-producing enterprise is looked upon as a trust fund for the bondholder, and as at no time belonging to the governmental body, the remedy in equity should be available,[63] and a receiver appointable to collect, apply, and account for the revenues, even in the absence of statutory authority. However, the appointment of receivers has been expressly authorized in some 26 states. In these states the bondholders will be less dependent upon mere judicial reasoning as to the available remedies.

In some instances the statutes treat the duties of the receiver at length. The Georgia statute provides that if a default in the payment of principal or interest continues for 30 days, or if the municipality or the governing body "fails or refuses to comply with the essential provisions" of the act, any holders or their trustee shall have the right to apply to the superior court of the county in which the municipality is located or any court of competent jurisdiction, for the appointment of a receiver.[64] "Upon such application the Superior Court, if it deem such action necessary for the protection of

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[62] Pershing, *op. cit.*, p. 76. In this section on legal remedies I have drawn freely from Mr. Pershing's article.
[63] *Ibid.*, p. 75.
[64] Laws (1937), p. 767, No. 513, sec. 8.

period not to exceed 20 years shall be given to the new owners, while the Wisconsin provision is for an indeterminate permit. No limit is named in Louisiana or in Missouri. In the latter case the constitution carefully forestalls any further claims of the bondholders by stating that if the property is not redeemed within the year of grace by the municipality "all liability of the city on said bonds shall cease and determine."[68]

The right to grant a mortgage is expressly recognized by 19 statutes out of the 41 consulted, as already noted in the previous chapter, but the mortgages permitted vary greatly as to their content. Some amount to little more than a pledge of earnings. In at least one state—Texas—the right to foreclose a mortgage has been held to exist only in case the revenue were sufficient but not properly disbursed. When the city paid out all the net revenues, which was all the money payment that the original agreement called for, the court would not permit foreclosure. But as the statute provided that the rates charged were to be sufficient to pay the debt charges, the creditor was held still to have a remedy.[69] This ruling does not seem to be as satisfactory to the creditor as he might wish. It is not at all impossible that the mortgagee could make the enterprise pay, even if the entity could not or would not.[70] The public body might be charging general city expenses against the project's income or might not be collecting the bills as rendered. Of course, if the facts were known, the mortgagee could bring an action to compel the city to perform its part of the contract properly, but such a right would not necessarily be equivalent to possession of the enterprise.[71] In an Illinois case,[72] it was held that title to the property did not pass at foreclosure but only the use for as long a time—up to 50 years—as necessary to pay the claims of the bondholders. Similarly, in Kentucky the courts held that the existence of a mortgage did not provide the right to compel a sale of the property.[73]

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[68] Art. 10, sec. 12.

[69] City of Seymour *v.* Municipal Acceptance Corp., Tex. Civ. App., 96 S. W. (2d) 814 (1936).

[70] See Judge Black's concurring opinion in United Gas Public Service Co. *v.* Texas *et. al.*, 303 U. S. 123, 146 (1938) as to the ability of a private operator of a utility to increase expenses at will. City management could do likewise.

[71] For an argument to the contrary, see Pershing, *op. cit.*, p. 82.

[72] City of Jerseyville *v.* Connett, 49 Fed. (2d) 246 (1931).

[73] City of Bowling Green *v.* Kirby, 220 Ky. 839, 295 S. W. 1004 (1927).

Where a mortgage accompanies the revenue bonds, the courts will have to determine whether a franchise to operate the enterprise can be successfully demanded by the mortgagee, and if it can be, whether it will be exclusive.

Other rights and remedies of the revenue bond owner. Where the statute does not confine the bondholder to the special fund, the courts have not limited the holder to the fund, but have allowed him access to tax moneys, even though the wording of the bond itself negatives such recourse.[73a]

The Michigan Supreme Court has held that if a city unlawfully diverts funds arising out of the operation of a plant from the purposes for which they were appropriated by statute, the city will be liable in a suit for a money judgment, but the Alabama rule is the exact opposite.[74]

As between fellow holders of bonds of the same issue, if the courts follow the principle laid down in a case that involved tax-anticipation certificates, no one creditor will be entitled to preference, but all creditors will share in a common fund, and "the distribution should be *pro rata,* not 'first come, first served.' "[75]

Negotiability

In any discussion of remedies some inquiry into the negotiability of revenue bonds is called for. If they are negotiable instruments, and if they have found their way into the hands of innocent purchasers for value, in advance of the date of maturity, defenses which the borrowing entity might otherwise impose against a bondholder will be unavailable. To be a negotiable instrument at common law, the obligation must be an unconditional promise to pay the principal and interest—not a promise contingent for fulfillment upon the existence of an adequate amount in some particular account or fund. But to quote Pershing again: "The municipal revenue bond is payable from a special fund; in the absence of statute, therefore, it is not negotiable."[76] As indicated, an instrument may be made negotiable by statute,

[73a] Pershing, *op cit.,* p. 75, citing L W Hancock Co. *v.* City of Mt. Sterling, 170 Ky. 207, 185 S. W. 856 (1916).

[74] As cited by Pershing, *op. cit.,* p. 77.

[75] Norfolk and Western Ry. Co. *v.* Board of Education, 14 Fed. Supp. 475 (1936), as cited in 2 *Legal Notes on Local Govt.* (January 1937), 225.

[76] *Op. cit.,* p. 73.

thereby leaving only the so-called "real defenses" available to the city against claims presented by bondholders who are holders in due course. However, Pershing points out, if this is done, the courts may then rule, as they did in Alabama, that the instrument is as much a part of the city's legal indebtedness as are its general obligation bonds.[77] If that is the outcome, the city might as well issue general obligation bonds in the first instance, unless it is able to save some of the advantages of negotiability by amendment. After the Alabama court's decision the state legislature amended the statute to read: "Such bonds shall have all of the qualities and incidents of negotiable instruments under the law merchant and the negotiable instruments law, except that they shall not be construed as containing an unconditional promise to pay." [78]

Thirty out of 41 statutes consulted expressly provided that the revenue bonds issued should be negotiable, or could be made so, if the issuing body so chose. While negotiability would thus be determined within a state, the same rule would not be binding on other states, but it is believed that foreign obligations, that is, instruments issued in another state, would be considered negotiable in states other than those of issue, provided they had been declared to be negotiable by the issuing bodies.

How important actually is this existence or absence of negotiability? One municipal bond house representative has expressed the opinion that it makes very little difference. His explanation is that municipal bond sales are made largely to life insurance companies and other large buyers who are not in the habit of selling the securities frequently, but who buy them primarily to hold as investments, very likely to maturity. If the validity of the issue is carefully checked in the beginning, permanent holders are as well off when the bonds are not negotiable as they would be with negotiable instruments. In fact, they may be in a better position, insofar as their rights are protected by reason of the nonnegotiability against the claims of an innocent third party who might come into possession of the bonds as the result of a theft. The market makes

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[77] *Ibid.*, citing Oppenheim *v.* City of Florence, 229 Ala. 50, 62, 155 So. 859, 864 (1934), in which the court pointed out this danger.

[78] Acts (Spec. Sess. 1936–1937), No. 203, sec. 6.

little or no distinction in the prices quoted for the two types of obligations.

Appraisal

The present and future legal status of revenue bond remedies as seen by one legal authority [79] can be summarized as follows:

1. The writ of mandamus will be a valuable but not an adequate remedy.
2. The duty to levy and collect rates sufficient to pay operating expenses, accumulate a bond fund and pay interest on the bonds should be expressed, but because the situation of the future, especially in a business enterprise, cannot be perfectly foreseen, it is not possible to express all the duties which bondholders would later like to have the responsible officials perform.
3. Money judgments should be obtainable by the injured parties in cases of negligent conduct by the local body. Certainly funds derived from the revenue project ought to be subject to execution by the revenue bondholders. The immunity that goes with the exercise of governmental powers is not relevant where the powers that are made use of are proprietary.
4. Statutory provisions for the appointment of receivers, or for the execution of mortgages, ought to be present in the law.

Where the revenue bonds are issued without express statutory authority, Pershing indicates that the following questions still have to be answered by the courts:

1. Is the revenue bond a negotiable instrument?
2. Has the issuing body the power to charge and collect rates and to regulate rates to be charged for the use of the facilities rendered?
3. In the event of default may a single bondholder have recourse to the courts without suing in a representative capacity?
4. May the bondholder compel the appointment of a court officer to operate the project?
5. In the event of diversion or misuse of the revenues collected from the operation of the undertaking, has the bondholder any remedy against the issuing body at large? [80]

Another lawyer, Robert Taft, concludes that, where the revenue bond contains adequate provisions for receivership or foreclosure, "the legal remedy is probably more effective than the remedy in the case of general lien bonds." [81] Too often

[79] John Pershing.
[80] *Op. cit.*, p. 67.
[81] *Op. cit.*, p. 1346.

the right of mandamus, the main remedy of the general obligation bondholder, turns out to be "long, complicated, and uncertain," [82] partly because of the courts' lack of enthusiasm for the remedy, and partly on account of a weakening in times of depression of the will to pay debt charges.

Chapman and Cutler, leading Chicago municipal bond counsel, likewise have spoken highly of the revenue bond remedy:

> Having issued Water Revenue Bonds, a municipality must fulfill the obligations, covenants and agreements imposed upon it by the law authorizing such bonds and the ordinances enacted pursuant thereto, all of which can be enforced by the bondholders by appropriate legal action, and such rights and remedies afford and constitute tangible security for the payment of such bonds.
>
> It is our opinion that holders of Water Revenue Bonds which have been properly issued can more expeditiously and by a more simplified procedure enforce their rights against a municipality than can the holders of bonds which according to their terms are payable from ad valorem taxes.[83]

A Recent Case

Most of the discussion so far has been based on the expressed expectations of legal experts, reasoning by analogy, as to what the courts would probably decide when actual revenue bond default cases were presented to them. Recently, however, an actual case—that of Realty Company *v.* Borough of Port Vue [84]—was fought all the way up to the Pennsylvania Supreme Court, and while the decision is not binding in other jurisdictions, it may be looked to by other courts as a leading case.

A private water company, the Port Vue Water Company,

[82] *Ibid.*, p. 1347. See also Arnold Frye's comment on the futility of mandamus as a remedy when used in connection with general obligation bonds, in his article: "Municipal Insolvency: Its Special Problems from the Point of View of the General Practitioner," 2 *Legal Notes on Local Govt.* 195, 196 (January 1937), where he says: "The remedy was effective for the establishment of the bondholders' right to payment, but was not effective in securing the payment, of money."

[83] *Water Revenue Bonds* (C. W. McNear & Co., Chicago, Ill., 1932), p. 5. While their letter to C. W. McNear & Co. was written with water revenue bonds especially in mind, the statements are also pertinent to other revenue bonds.

[84] 318 Pa. 374, 178 A. 466 (1935), where a brief opinion appears. For an extended account of the facts and law as found by the lower court, whose opinion was adopted by the Pennsylvania Supreme Court, see 84 *Pittsburgh Legal Jour.* 441 ff. (1936).

had been incorporated in 1901 for the purpose of supplying water to the public in the borough of Port Vue, Pennsylvania. The company was actively engaged in the utility business until its water plant and property were acquired by the borough in 1923. In that year the borough, acting in conformity with a 1915 law,[85] which authorized the issuance of bonds payable solely out of revenues, sold $31,000 of 5 per cent term bonds (representing the entire purchase price), due January 1, 1953, to the plaintiff, the Realty Company, which continued to hold the bonds up to the time of the suit. With the proceeds of the bond issue the borough bought the plant and property of the private company. Each of the bonds contained the statement that "provision has been made out of the revenues of the water works of the said borough to pay the interest on the said bonds and the principal thereof . . . and that all the property, pipes, lines, and other belongings and appurtenances of the water works system and property belonging to the Port Vue Water company and for the purchase of which these bonds were issued by the borough of Port Vue together with the revenues thereof, are hereby pledged for the payment of the redemption of this bond and all interest coupons." [86] There was no recourse to taxation and the bonds were true revenue bonds.

For seven years the borough paid the interest, as it fell due, defaulting for the first time in 1930. During the borough's operation of the waterworks it kept a general account, called "Sinking Fund No. 5," in which it commingled the water revenues and certain tax proceeds. From this same fund the borough paid most of the expenses of operating the plant, and the outlays for extensions and enlargements, including interest on an additional lot of bonds sold to provide the balance of the funds needed for the improvements.

The borough, prior to acquisition of the plant, had paid the private company $35 per annum per fire plug, and continued to pay the same sum into the water account up until 1927, after which year no more payments were made. Furthermore, the borough did not create any sinking fund, nor did it set aside, at any time, any of the revenues from its water plant toward amortization of the $31,000 of water bonds. The

[85] Laws (1915), p. 312, c. VI, Art. XVII.
[86] 84 *Pittsburgh Legal Jour.* 441, 445 (1936).

minimum residential charge per quarter which had been $3.50 under private operation was continued only up to January 1, 1925, at which time it was reduced to $2.50, and again to $1.80, as of January 1, 1928.

For a little over four years the waterworks was managed by a waterworks commission appointed by the court of common pleas in accordance with an act dated June 5, 1913.[87] After that time, the system was operated by a waterworks committee of the borough council.

The Realty Company did not present any evidence, during the trial, to show that the rates charged were unreasonably low, nor did it otherwise complain, prior to this suit, but the net revenues were, in fact, never sufficient, following the default, to pay the coupons.

The plaintiff Realty Company, holder of the bonds, brought a bill in equity in the Allegheny County Common Pleas court in 1932 asking, among other things (1) that the bonds be declared a first lien on the waterworks system, (2) that the borough be declared to have pledged the operating revenues accruing from the plant, (3) that the defendants as trustees be held accountable to the owners of the bonds for the management and operation of the plant, for the sufficiency of the rates charged and for their proper application, (4) that they be held liable for the payment of all over-due interest coupons, and (5) that if they failed to pay the defaulted interest, and to restore and maintain the sinking fund to its proper amount, a foreclosure and sale of all the interest of the borough in the property of the water system be ordered.

The court (Justice McNaugher) in discussing the case declared that the exact meaning of the word "revenues," as used in the text of the bond [88] was of importance only insofar as the interpretation might affect the form and extent of the remedy given, since the property itself was pledged as security, and the plaintiff could stand on its demand for foreclosure.

The statute under which the bonds had been issued read, in part: "The borough shall provide a sinking fund for the *revenues* derived from such water works or system, for the payment of the interest on such bonds and for their redemp-

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[87] Laws (1913), p. 445.

[88] See p. 67.

tion."[89] Therefore, if the term "revenues" meant "net revenues" there would be no cause for complaint by the plaintiff, as far as the covenant to pay the principal and interest of the bonds out of the revenue was concerned, since there were admittedly no net revenes.

However, the court said that, if the term meant gross revenues, "then the failure to set up a sinking fund and contribute thereto was a breach of duty owing to the bondholder and if foreclosure is to be withheld the borough should be required to establish the fund and to pay into it all moneys which ought formerly to have been applied."[90] The court concluded that the borough must have intended to promise "something substantial"[91] not merely "precarious net profits,"[92] the court pointing out that there was no covenant to maintain the rates and that the borough could have gone even further and abolished them altogether, depending upon tax proceeds for the operating expenses and other charges of the system.[93] Furthermore, under the enabling law,[94] establishment of a sinking fund was mandatory, and the court thought that that, too, indicated an intention to pledge gross revenues rather than net revenues.

The plaintiff's attorneys themselves had originally argued somewhat in terms of net revenues rather than gross, but the court held that such action was not fatal to the plaintiff's case. Nor would the court countenance the argument that net revenues must have been intended because application of gross revenues to payment of the bonds might prevent operation of the plant. Operating expense could be provided for out of taxation, or by "other measures."[95]

In addition to this significant interpretation of the term "revenues" where, as is frequently the case in other states also, the revenue bond statute is vague, the court also held that the extensions that had been made to the property had been made upon the borough's own responsibility and even though ad-

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[89] Italics added.

[90] 84 *Pittsburgh Legal Jour.* 450 (1936).

[91] *Ibid.*

[92] *Ibid.*

[93] It would seem that gross revenues might then have been quite as "precarious" as net revenues.

[94] Laws (1915), p. 373.

[95] 84 *Pittsburgh Legal Jour.* 451 (1936).

vantageous to the system "must all have been subject to the first lien of the bondholders."[96] The property acquired, following the date of the bonds, was thus held to comprise additional security for the bondholders.

Nor would the court hold that the revenue bondholder was guilty of negligence in not objecting to the low rates charged the consumers or to the lack of a sinking fund. "It was not plaintiff's duty to supervise the conduct of the borough in the management of the plant," the court declared.[97] Counsel for the borough argued that the borough was in a position similar to that of a mortgagee or receiver, and therefore owed no duty to the previous owners of the property, but the court held that the borough was, rather, in the position of a purchaser of real estate who gives back a purchase money mortgage.

Whether the rates were reasonable could not be determined from the evidence, the court declared, but the decision indicated that the uncertainty made no difference anyway, since the borough was bound, under its contract, to set aside in a sinking fund amounts sufficient both to pay the interest and to amortize the principal of the bonds. The borough not having set aside such amounts, and being in default of several years' interest, the court held that foreclosure was a permissible remedy. "The bond contract entered into by the municipality in its proprietary capacity is as binding upon it as would be so in the case of a private corporation,"[98] said the court.

Because of the interest of the borough's taxpayers in the preservation of their water plant and because of the then existing economic depression, the court in its equity capacity strove to be lenient. It found that (1) the borough was in default of interest totaling $6,994.64, representing the total of overdue interest coupons with legal interest from the respective dates of default to the date of the decree, May 21, 1934, and (2) that the borough was in default respecting the sinking fund in the amount of $6,842.51.

To correct the situation the court ordered the borough to pay, on or before October 1, 1935 (a date about 16 months forward), to the plaintiff, all back interest, including legal

[96] *Ibid.*
[97] *Ibid.*
[98] *Ibid.*, p. 452.

interest on interest, and to establish, on or before Decemb 31, 1937, a sinking fund in an amount equal to that then dı under the terms of the bonds. This sinking fund was to l established solely with an eye to amortizing the debt. this were not done the court declared that foreclosure wou be permitted. At the same time the costs were assessed again the defendant borough.

The borough objected to the decree at a later hearing befo the same court upon exceptions noted. Among other reasor it alleged that the order to pay the stated sums amounted a money judgment, and thus acted to create a general liabili which was exactly the type of liability which the method financing used was supposed to avoid. The court held th it had not decreed a money judgment, but had given tl borough the choice of making payment or suffering foreclosu on its pledged property. "This is not a creation of a gener liability but rather the postponement of the application the remedy allowed by the constitution and statute ar called for by the provisions of the bonds," [99] said the cour It found that the contract contained two separate and distin provisions: the first, an unqualified promise to pay princip and interest; the second, a pledge of property and revenues secure payment, and the limitation of the bondholder to tho sources of payment. Thus it was no general indebtedne within the meaning of the constitution, but neither was it mere promise to pay only in the event that the revenues fro operation of the enterprise were sufficient. It was an uncond tional promise to pay, and the borough was responsible f securing the funds from some source, or losing the property.

Upon appeal to the state supreme court, that court, April, 1935, completely sustained the lower court and declarec "The borough council must either raise the water rates to tl point where the revenues will be adequate to cover its oblig tions on these bonds or refinance the debt in some other ma ner, else it will lose the waterworks. . . . [The terms of tl decree] were just, indeed generous . . . and they secure the borough all the protection to which it is entitled." [101]

In December, 1935, the borough not having complied wi

[99] *Ibid.*, p. 455.
[100] *Ibid.*, p. 456.
[101] 318 Pa. 374, 178 A. 466 (1935).

the court order, the Realty Company requested permission to foreclose the lien. The court of original jurisdiction ordered the borough to show cause why foreclosure should not be permitted, and the borough, in its answer, argued that any foreclosure and sale should be for the past due interest only, since the bonds contained no acceleration clause declaring the principal to be due before maturity in case of default on the interest. The court would not agree, but found that the sinking fund payments that had been ordered in the court's original decree were, in effect, installment payments upon the principal, and that the borough had disobeyed the decree in respect to the sinking fund. It then entered an order of foreclosure, declaring the plaintiff's lien to be $41,997.25, representing the principal debt of $31,000, together with the sum of $10,997.25, being the interest due to the date of decree. To this the court added costs of $2,178.25. The court appointed a master whose sole duty was to sell the entire property, and the prospective purchasers were directed to continue operation of the water system without interruption. In addition, they were to be under the direction of the court until they had secured a certificate of convenience from the public service commission of the state.

An editor's note at the very end of the account of the extensive proceedings reads, significantly: "The foregoing decree directing a sale was stayed when defendant cured the defaults and complied with the terms of the original decree." [102]

Summarizing, we have here an instance of revenue bonds issued some years ago on which payments were made for a time and then were allowed to lapse, a protracted default with a recalcitrant or stubborn debtor resisting attempts at collection, a thorough recorded airing of the facts of the case, along with a discussion of the merits of the arguments; also, interpretation of an important bond covenant and of part of the relevant statute, comments on the equity of the case, records of successive hearings, complete approval of the findings by the state supreme court, final order of sale of the property, and a last-minute surrender by the borough, with complete victory for the bondholders, even to interest on past due interest.

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[102] 84 *Pittsburgh Legal Jour.* 466 (1936). Also reported cured, as of Dec. 2, 1936, in the *Bond Buyer* office file of defaults.

In no other case have the rights and remedies of the bondholders been so thoroughly examined and developed.

As said before, this is only Pennsylvania law, but insofar as the courts of other states are likely to lean on precedent, this may be prophetic of revenue bondholders' remedies generally.

The significant holdings of the court are (1) the insistence that the promise of the community was an unqualified promise to pay, and yet not a general obligation of the community; [103] (2) the ruling that the covenants made by the community in its proprietary capacity are binding in, substantially, the same way and to the same degree as if they were made by a private person; (3) the finding that the interest and sinking fund payments constitute virtually a first charge upon the revenues, and that if the residue is inadequate for operating expenses, the community should raise the required amounts by taxes or other devices; (4) the granting of foreclosure against a necessary utility, but arranging for the protection of the public users of the service; and (5) the penalizing of the defaulter with additional interest on the defaulted interest and with the court costs of the proceedings.

[103] This is a conception of revenue bonds that sees in revenue bonds a stronger obligation to pay than has generally been admitted. It might also warrant the holding of revenue bonds to be negotiable instruments even though payment cannot be compelled from taxation.

CHAPTER IV

Pre-Marketing Aspects

Federal Government

THE Federal Constitution authorizes Congress "To borrow money on the credit of the United States."[1] Although this phrase would seem to make it impossible for the Federal government to borrow money in the absence of a pledge of the nation's general credit, it has, nevertheless, been found possible for the government to avoid the effect of this provision. The means chosen has been the creation of subordinate bodies, which bodies then borrow in their own names. The Federal Land Banks, Joint Stock Land Banks, and the Federal Home Loan Banks are excluded from the class immediately under consideration, since the banks named are always partly or even wholly owned by private individuals, but the Federal Intermediate Credit Banks are exclusively governmental bodies. Since the debentures which they issue are, at least technically, payable solely out of the resources of the Intermediate Credit Banks, and not out of any other Federal funds, it is legitimate to include such debentures in the revenue bond category.

The only other known case of a revenue bond obligation that has been issued by an instrumentality of the Federal government is that of the early obligations of the Home Owners' Loan Corporation. In the beginning only the interest payments were guaranteed.[2] Consequently, the unguaranteed principal of the corporation's bonds constituted a true revenue obligation, payable only from the resources of the corporation. Later the law was amended to provide that

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[1] Art. I, sec. 8, par. 2

[2] 48 Stat. 130 (1933).

both the interest and the principal amounts should be guaranteed by the Federal government.[3]

States

The states have issued very few true revenue bonds. If the states do not wish to pledge their own credit they, like the Federal government, usually form a more or less autonomous body, which body does the actual borrowing. Such creations may be as independent as the statutory authorities, or they may merely be agencies or instrumentalities of the states—"arms" of the states, they are sometimes called. The Kentucky State Highway Commission and the Alabama State Bridge Corporation are two illustrations of state agencies that are only slightly separated from the states themselves.

Even if the bonds issued by these agencies were signed by the officers of the states in their capacities as state officials, most of the obligations would not be true state revenue bonds, since revenues not resulting directly from the projects financed are frequently pledged as partial, or, in some cases, as the only security for the bonds. This indirect source of income is common to the state highway revenue bonds of Colorado, Kansas, Louisiana, Maryland, Mississippi, Montana, New Mexico, and Wyoming. None of these is payable out of tolls that are charged for the use of the roads, but, instead, gasoline taxes are the usual source of income pledged for the protection of the bonds.[4]

The situation is similar in the case of state educational institutions. Bonds sold to finance the needs of such institutions are commonly issued in the name of some state agency, and are made payable out of resources other than those directly resulting from the expenditure of the borrowed funds.

Again, Illinois and Indiana have armory revenue bonds outstanding, but in both cases the obligations are issued by agencies or boards.

Other states reveal similar situations. Not to prolong the survey, it may simply be noted that not one single state revenue bond, as strictly defined here, has been discovered de-

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[3] 48 Stat. 643 (1934).

[4] For information about these obligations see Edna Trull, *Borrowing for Highways* (Dun & Bradstreet, Inc., New York, 1937).

spite much searching, not only through current sources of information, but even among past records, both financial and legal.

Statistics

It is apparent, therefore, that the great majority of revenue bonds must be the obligations of political entities of lesser stature than the Federal government or the states. This is confirmed by Table 1, which classifies the nation's revenue bonds both by the nature of the issuing unit and according to the market in which they were first disposed. Data in the private investing field are admittedly incomplete, especially in respect to the bonds issued by the very small communities. On the other hand, there is some danger of counting government-bought issues twice. This could happen, for instance, in case an issue, originally sold to the PWA, is transferred by that organization to the RFC, and perhaps resold by the RFC to the private bankers. The intent has been to avoid any such double counting of issues. The table shows heavy concentration of the number of loans—noticeably so, in view of the fact that the number of loans sold in the private market is somewhat greater than the number of issuing units—in municipalities, but the comparatively few statutory authorities are responsible for a larger dollar volume of bonds than are the many municipalities. The amount of one Port of New York Authority loan may be equal to that of hundreds of small community loans. Revenue bond financing by counties is relatively unimportant, both as to the number of the loans and as to the amount involved. The showing made by the townships is still less significant. Although the dates used are not quite uniform, the amount of revenue bonds outstanding is certainly in excess of $1,000,000,000.

Distribution of all revenue bonds by types of project is shown in Table 2. One is quite safe in saying that water projects are represented by the largest number of loans, despite the again incomplete knowledge respecting the *number* of individual issues marketed by borrowers through private channels, and it is clear that bridge loans rank first when ranked according to dollar volume, with electric light and power loans a poor second, while water issues are a close third.

TABLE 1

TOTAL REVENUE BONDS OUTSTANDING, BY ISSUING POLITICAL UNITS, AND BY ORIGINAL PURCHASERS *

Issuing Political Units	Original Purchasers of the Revenue Bonds: Non-Gov't Number**	Non-Gov't Volume	PWA Number	PWA Volume	RFC Number	RFC Volume	REA Number	REA Volume
Municipalities	171**	$231,333,628	860	$56,817,300	35	$30,131,000		
Townships	1**	115,000	3	351,000				
Counties	10**	5,073,000	30	3,955,000				
Authorities	22**	289,637,000	23	79,918,000	7	80,732,000	(20	$6,178,136)†
State Agencies	10**	28,258,000	135	24,932,000	1	40,000		
Fed. Agencies	1**	189,745,000						
Total	215**	$744,161,628	1051	$165,973,300	43	$110,903,000	20	$6,178,136

Sources: PWA, RFC, and REA Administrations; also *Moody Manuals*, and *Commercial and Finanacial Chronicle: State and Municipal Compendium.*

* The non-government loans are as of late 1937; PWA, as of Aug. 23, 1937; RFC and REA, as of June 30, 1937. PWA and RFC amounts are those of the original loans. The totals shown exceed the totals actually outstanding to the extent that small unknown amounts of early scheduled payments have matured.

** Number of issuing units; number of separate issues not available in every case.

† Exact political composition not determined.

TABLE 2

TOTAL REVENUE BONDS OUTSTANDING, BY TYPES OF ENTERPRISE, AND BY ORIGINAL PURCHASERS *

Type of Enterprise	Non-Gov't *Number***	Non-Gov't *Volume*	PWA *Number*	PWA *Volume*	RFC *Number*	RFC *Volume*	REA *Number*	REA *Volume*
Bridge	18**	$244,370,000	12	$44,095,000	4	$71,832,000		
Education	14**	7,752,000	150	21,753,000				
Electric Light and Power	25**	104,731,200	19	15,744,000	1	22,799,000	20	$6,178,136
Gas	2**	8,011,000	21	994,000	1	40,000		
Hospital			18	2,212,000				
Sewer	20**	10,421,000	145	18,485,100	3	698,000		
Water	112**	100,582,431	611	29,409,700	26	6.364,000		
Water and Sewer	11**	2,087,000	38	3,168,500	1	20,000		
Other Multiple Purpose	1**	39,000	7	11,364,000				
Miscellaneous	12**	266,167,997†	30	18,748,000	7	9,150,000		
Total	215	$744,161,628	1051	$165.973,300	43	$110,903,000	20	$6,178,136

Source: Same as for Table 1.
* Figures are as of same dates as in Table 1.
** Number of issuing units; number of separate issues not available in every case.
† Includes $189,745,000 Federal Intermediate Credit bonds, $44,072,000 Port of New York Authority's Holland Tunnel bonds, and $13,470,000 of the Port of New York Authority's Inland Terminal bonds.

In this running comparison of types, the unique Federal Intermediate Credit bonds have been purposely excluded from definite classification.

In 1937 the Bureau of the Census, for the first time, segregated revenue bonds in compiling the 1936 *Financial Statistics of Cities Having a Population of Over 100,000.* The Bureau includes in the debts of the cities the obligations of all overlying units of government. This practice causes authority revenue bond debt to be included among the debts of a city, where the authority or authorities are practically coextensive with the municipality. Revenue obligations at the close of the fiscal year, for the 94 cities having a population of more than 100,000, amounted to $170,779,495, as against a total gross debt for all these cities of $8,286,222,906, or a little over 2 per cent of the total gross debt. Of that portion of the cities' gross debt which was incurred for public service enterprises ($2.823,728,036), the revenue bond debt represented a little over 6 per cent.[5]

Thirteen of the nation's 94 largest cities are listed as having received funds during the fiscal year of 1936 as a result of the issuance of revenue bonds.[6] The amount received was $48,-725,000, or about 3.7 per cent of the total funds received by the cities during the year as the result of all debt financing. Three large issues, for which the Triborough Authority of New York and the cities of Los Angeles and Seattle were responsible, accounted for nearly five-sixths of the total. A more complete survey is possible if one examines the lists of principal domestic bond offerings for the years 1936 and 1937 as printed in the *Moody's Government and Municipal Manuals* of 1937 and 1938.[7] In 1936, out of a total of 1,044 offerings amounting to $931,234,566, revenue bond loans totaled 73 issues and $87,545,-000, or about 7 per cent in number and 9.4 per cent in dollar volume. The following year there were 48 revenue bond loans, in the amount of $149,726,000, out of a total of 907 loans aggregating $812,779,783, or about 5.5 per cent in number, and 18.5 per cent of the dollar volume of all borrowings. Huge New York authority loans in each year tended to raise the percentage

[5] *Financial Statistics of Cities Having a Population of Over 100,000: 1936* (Bureau of the Census, Washington, D. C., 1938), Table 22, p. 172.

[6] *Financial Statistics of Cities Having a Population of Over 100,000: 1936* (Bureau of the Census, Washington, D. C., 1938), Table 18.

[7] P. a11 in both instances.

that the revenue bond dollar volume composed of the total dollar volume above the corresponding percentage as calculated for the number of revenue bond loans.

Of the total borrowings of $297,747,610 in 1937, as negotiated by cities, towns, and boroughs only, and ignoring for the moment the state agency and authority loans, revenue bond loans amounted to $72,576,048, or almost 25 per cent of the total.[8]

Method of Pre-Sale Distribution

In those few 1933 statutes which restrict the sale of municipalities' revenue bonds to the United States Government or to one of its agencies, the marketing method is very simple. An agreement is reached between representatives of the two contracting bodies and after the proper legal steps, including the holding of an election, if required, the bonds are periodically turned over to the Federal government, or its agency, as funds are required.[9] In the more numerous cases which provide that the bonds may be sold either to the United States or to private interests, the procedure may parallel that already mentioned if the sale is made to the United States, or, if sold to private buyers, it may be similar to the procedure usually associated with the sale of "regular"—that is, tax-supported general obligation—bonds. Where the sale of revenue bonds is not made to the Federal government, the method of pre-sale distribution, insofar as it differs from the marketing practice associated with the sale of general obligation bonds, is apt to differ in (1) the matter of holding an election, (2) the requirement as to the method of making the sale of the bonds, *i.e.*, whether the sale shall be public or private, (3) the character of the investment banking houses to whom the sale is made, (4) the technical provisions written into the bond contract, (5) the methods of resale used by the investment bankers, and (6) the sources of capital funds sought.

Whereas an election is almost universally required where tax

[8] Compiled from and computed with the aid of *Municipal Bond Sales: 1937* (The Bond Buyer, New York, 1938), *passim*. Large loans negotiated by the Los Angeles Department of Water and Power accounted for $57,200,000 of the $72,576,048 total.

[9] For a fuller description of the method used when sales are made to the Federal government or agency, see Chapter VIII, "The Federal Government and Revenue Bonds."

obligations are to be issued, it has been noted [10] that elections are frequently eliminated when revenue bonds are used. Somewhat less frequently the requirement for a public sale is omitted. Eleven out of the 41 statutes examined clearly permitted private sale, while the rest either required the bonds to be sold publicly, or else were silent as to the method of sale. This tendency to permit private sales in the case of revenue bonds is not one to be encouraged. As Fraser Brown says: "There are no disadvantages to the broker in a private sale." [11] It may be that, in exceptional cases, the underwriter is put to such expense in investigating and organizing a new revenue bond issue that he ought to be protected against competition at the time of the bond sale, but it would seem that proper compensation could be made directly by the municipality for the "exploratory" services rendered by the investment banking firm, with possibly better net results in the long run to the borrower. It might also be pointed out that, over a period of time, bidders are likely to recoup all costs, despite occasional unprofitable ventures. Furthermore, as revenue bond projects become standardized, the pioneering factor will be less and less important.

The third difference noted in the methods employed in marketing revenue bonds as compared with those used for general obligation bonds has to do with the differences respecting the bond houses to whom the sales are made. This distinction is becoming blurred as revenue bonds come to be more widely understood and desired by both large and small investors. At one time a half-dozen houses, and those not even the largest among the municipal bond houses, were responsible for most of the revenue bond issues. One explanation of this situation lies in the fact that only a few banking firms knew how to "set up" the revenue bond issues. Even to this day one of these specializing houses, even though not possessing a large distributing organization of its own, may actually take care of the preliminary arrangements for a consideration, although a larger house may appear in the role of chief, or sole, underwriter when the re-offering is announced. A second reason why revenue bonds were promoted by a limited number of houses was the legal inability of savings banks to purchase, and

[10] See p. 28.
[11] *Municipal Bonds* (Prentice-Hall, Inc., New York, 1922), p. 85

the lack of authority on the part of trustees to invest in, the bonds. These legal disabilities, added to the distaste of life insurance companies for revenue bonds, left the revenue bonds to depend upon the smaller investors for their market, and this meant that those municipal bond houses which had a large following among individual investors tended to be the main distributors of revenue bonds. These firms were occasionally, but not always, houses that also did a sizable business with the large institutions. Thus, there tended to be one group of municipal bond houses dealing primarily in general obligation bonds, legal for all investment purposes, and a second group specializing in limited obligation bonds.

The last of the distinctions between the two types of bonds that is applicable to the period prior to the public distribution is the difference in the technical provisions written into the bond contract. After all, the two types of bonds are quite unlike. One is an unconditional promise to pay at all events, with the understanding that, if a default occurs, the bondholders will be entitled to have a court order issued directing the responsible officials to levy a tax that should, in time, recoup their investment; the other is a promise to pay from a limited source, the adequacy of which is not guaranteed. Because of the limited source of revenue, and the lack of a guaranty, the manner in which the community uses the funds that are derived from the sale of revenue bonds is much more important to the bondholder than is the nature of the use made of funds derived from a sale of general obligation bonds.

For these reasons the revenue bond resolution, instead of being as brief and perfunctory as it often is in the case of full faith and credit obligations, is likely to be extensive and detailed. It customarily sets forth, in addition to the usual items found in general obligation resolutions, such as the form of the bond, the form of coupon, and matters of registration, call rights and the like, provisions relating to the establishment of separate funds into which the proceeds of the loans, and the revenues resulting from the project, are to be deposited, and provisions relating to the management and operation of the enterprise. It is also apt to include covenants dealing with the beginning rates to be charged; the changes of rates to be made, if necessary; the collection of the bills rendered; the insuring of the property; and the keeping of separate books of

account for the project. Such matters in the past have been found more often in private corporation covenants than in municipal bond resolutions, and that fact helps to explain why writers emphasize the similarity between revenue bonds and private securities, and why they contend that revenue bonds should be investigated with the same criteria in mind as are employed in selecting private corporation bonds, hardly discussing them from the standpoint of municipal bonds at all.[12] It also explains why at least one New York investment banking concern which deals in both corporate and municipal securities depends upon its corporate department rather than its municipal purchasing department to investigate, purchase, and "set up" its revenue bond issues.

There are two ways of handling these detailed safety provisions. They may be included either in the bond resolution or in an indenture. Where the latter is used it may be, in effect, a supplement to the resolution, and most of the details may be relegated to the indenture. The use of indentures is rather the exceptional method, and the more common method is to use the resolution only.

The municipal bond attorneys are not in agreement as to the desirability of using indentures in connection with revenue bond loans. Some of the attorneys insist on the use of indentures in almost every case, while others consistently try to avoid them. A third group of attorneys thinks that the use of indentures is desirable in certain instances but is unnecessary in others.

The argument of the proponents of indentures is that, by using an indenture, a representative of the bondholders can be appointed, in the person of a trustee, who can then be charged with certain duties and given certain rights. The trustee, they say, can act much more quickly and efficiently in the interest of the bondholders than can a scattered group of bondholders. They hold that this would be advantageous both in the general supervision of the loan while it is in good standing, and also in the case of default.

The argument of the opponents of the use of the indenture is that all the desirable covenants respecting operation and maintenance of the enterprise and those related to the rights

[12] See Robert A. Taft, "A Review of the Special Lien Bond Situation," *Jour. of the Amer. Water Works Assn.* XXVII (October 1935), 1348 and 1352.

and remedies of the bondholders in case of default can be pledged to the bondholders in the resolution itself. They maintain, further, that, as indentures are usually drawn, the trustees are largely relieved of responsibility to act, and even where they are not so relieved, they may, in fact, be acting as trustees for so many issues simultaneously that they can hardly be thoroughly aware of the exact terms of all of the indentures. They also argue that the trustee may be chargeable with notice of defects, or of facts, which will estop it, the trustee, from asserting rights that otherwise would be available to individual bondholders who might not be so chargeable; consistent with this point of view, they, furthermore, contend that in actual practice the indenture may restrict the rights of the bondholders more than it enlarges them, even limiting their rights as individuals to bring suit, and compelling a minority of the bondholders to assent to modifications of the original contract upon the concerted action of a certain percentage of the holders acting through the trustees.

The middle-of-the-roaders say that the indenture is primarily useful in those cases in which the project is very large and beyond the usual size and kind handled by the community. In such cases, a trustee acting under an indenture may be able to supervise the payments of funds during the period of construction, and exercise some discretion during the later stages of the loan's existence. This exercise of discretion may well be to the true interest of the bondholders.

Indentures seem to be most commonly used in conjunction with bridge loans. The explanation may lie in the highly individualistic character of each bridge project. However, some of the largest bridge loans, such as the Triborough and Port of New York Authority issues, have not made use of indentures. In these cases a resolution and the appointment of a fiscal agent who is nominated to receive and disburse funds are relied upon to safeguard the bondholders' interests. The fiscal agent, however, does not act in any such extended and representative capacity for the bondholders as does a trustee.

A Typical Ordinance

A Detroit sewer revenue bond ordinance that was enacted in connection with proceedings that were taken to obtain a

PWA loan may be used to illustrate the typical features that are found in bond ordinances or resolutions.[13]

After reciting the necessity and desirability of the improvement, the ordinance states that the common council has caused an estimate of the cost of the project to be made (the state statutes frequently require such an advance estimate before a project can be undertaken), and has found the probable cost to be $20,000,000. Because of an impending PWA grant of 45 per cent of the cost of the project, the ordinance then goes on to authorize the sale of but $11,000,000 in serial bonds, dated October 15, 1935, and due up to and including 1965, as permitted by the appropriate statute.[14] The ordinance then lists the annual maturities, beginning with $230,000 in 1939, and increasing each year, sometimes by $10,000, in other years by $20,000, until the sum of $570,000 is scheduled for retirement in each of the last four years. The interest rate (4 per cent, of course, on all PWA loans), and form and place of payment of both principal and interest are given. It is expressly stated that the bonds "shall not be general obligation or indebtedness of the City of Detroit but shall be payable solely from the revenue derived from the operation" of the system,[15] including all future additions and extensions. To secure such payment, "a first lien upon the whole of the revenue" [16] of the system is created.

As to the remedies provided, care is taken to make sure that the bondholder will have no right to compel sale of the property, but it is stipulated that the holders of not less than 20 per cent of the issue outstanding at the time legal proceedings are instituted may bring an action to enforce their statutory lien on the income, and to compel the performance of all duties of the city's officers "including the fixing of sufficient rates, the collection of revenues, the proper segregation of revenues of the sewage system, and the proper application, thereof." [17] The existence of general authority in the proper courts to appoint a receiver is also recognized.

The rates to be charged for the sewer service are required to be set on a basis of the quantity of water used, and the bills

[13] No. 340-C, effective Oct. 28, 1935.

[14] In this case, Act No. 94, Public Acts of 1933.

[15] Section 4.

[16] *Ibid.*

[17] Section 5.

are to be collected in the same manner as the water bills. The precise rate to be charged—19½ cents per thousand cubic feet of water used—is named, and provision is made for differential treatment of those manufacturing or industrial enterprises which may be responsible for an unusual burden upon the system. In addition, the charges that are levied are to constitute a lien on the property served, and if not paid within 90 days are to be collected "in the same manner as general city taxes."[18] The city makes a general promise to fix and maintain rates (revising them when and if necessary) which will be sufficient to pay principal and interest as those items come due, to pay administration, operation and maintenance expenses, to create a "reasonable" depreciation reserve, and to establish a reserve for reasonable and proper improvements, betterments, and extensions. Separate funds for all four purposes are designated, and it is prescribed that any surpluses in the operation and maintenance fund, depreciation fund, or contingent fund, over and above certain minimum requirements, shall be turned over to the bond fund, to be used for the payment of principal and interest charges. Apart from these possible additions to the bond fund, it is required that "On the last business day of each month, there shall be paid into the Bond Fund an equal and proportionate monthly portion [of the interest and principal becoming due on the succeeding payment dates],"[19] and unless, and until, there has been accumulated in the bond fund a sum equal to two years' principal and interest requirements, additional payments of 10 per cent of the minimum required payment must be made.

Further along in the ordinance the city promises to maintain the sewage system in good condition, and to operate it in an efficient manner, and at a reasonable cost. It also pledges itself to carry insurance "of a kind and in an amount such as would be carried by private companies"[20] and to keep books of account (separate from all other records and accounts) in which correct entries will be made of all transactions, and to furnish, upon written request, to any holder of any of the bonds, complete operating and income statements and balance sheets. Any purchaser, holder or holders of 25 per cent of

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[18] Section 7.
[19] Sec. 9.
[20] Sec. 16. All quotations in this paragraph are from this section.

the outstanding bonds "shall have the right at all reasonable times to inspect said Sewage System and all records, accounts and data of the City of Detroit relating thereto."

The municipal commissioner of public works is appointed as supervisor of the construction, alteration, repair, operation, and management of the system, subject to the orders and regulations of the common council.

The parts of the ordinance which have been cited are foreign to the ordinary general obligation bond, and, at the same time, they lend strong support to the assertion that revenue bonds are more akin to private corporation bonds than they are to the standard municipal bond.[21]

Indentures

Some of the statutes expressly mention the fact that indentures may be used. South Carolina,[22] Arkansas,[23] Alabama,[24] Connecticut,[25] and North Dakota[26] may be cited as illustrations of states that have authorized their municipalities to make use of indentures.

The Connecticut statute provides that the trustee may be any trust company or bank having trust powers, "but no such trust indenture shall convey or mortgage the system or any part thereof. Such indenture may contain reasonable and adequate remedies of the bondholders *and may restrict their individual rights of action as is customary in trust indentures securing bonds and debentures of corporations.*"[27] The North Dakota indenture, like the Connecticut form, would be usable only with revenue bonds not secured by a mortgage. Indentures have been popularly associated with mortgages, but there is nothing to prevent their use wherever it is desired to prescribe certain definite arrangements between the debtor and creditor. The Louisville Bridge Commission made use of a

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[21] For the exact content of a revenue bond itself, see Appendix C, where the text of the Detroit sewer revenue bond is given.

[22] Acts (1933), c. 236, sec. 14.

[23] Acts (1933), c. 131, sec. 17.

[24] Acts (1933), c. 102, sec. 7 as amended by Acts (Spec. Sess. 1936–1937), No. 203, sec. 3. The indenture is mentioned only in the amendment.

[25] Gen. Stat. (Cum. Supp. 1931, 1933, 1935), c. 33 (a), sec 14 (c) and c. 33 (b), sec. 155 (c).

[26] Laws (1937), c. 104, sec. 8.

[27] See Footnote 25. Italics added.

68-page indenture unaccompanied by a mortgage in 1928. On the other hand, as has been noted, the large New York Authorities usually rely upon detailed resolutions rather than indentures, and the same is true of the large West Coast users, Los Angeles and Seattle.

Little Rock, Arkansas. As an excellent illustration of a municipal indenture, the Little Rock, Arkansas, indenture, used in securing that city's $6,590,000 water revenue bonds of 1936, may be cited. In this case the Guaranty Trust Company of New York was made the party of the second part, that is, the trustee. With this trustee the city covenanted "for the equal and proportionate benefit and security of all and singular the present and future holders of the bonds and interest coupons issued and to be issued under this indenture."[28] The cover of the 59-page trust indenture reads, in part, "The City of Little Rock, Arkansas, to Guaranty Trust Company of New York, as Trustee." Thus the bondholders do not appear as a direct party to the agreement at all.

The form of the bond, as cited in the indenture, does not vary fundamentally from that of a bond used in connection with a resolution only, as shown in Appendix C, except that it refers, naturally enough, to the supporting indenture rather than to an ordinance, and provides for a statutory mortgage lien upon the water system, whereas the Detroit loan was not supported by a mortgage. It is also declared that all of the unmatured bonds may be declared due and payable in the event of default. This provision is more a mark of difference between general obligation bonds (which do not usually so provide) and revenue bonds than between resolution and indenture revenue bonds, since the resolution could similarly prescribe the circumstances under which the unmatured bonds could be declared due and payable. The trustee is named registrar in the indenture, whereas the city comptroller was named registrar in the Detroit ordinance, but nothing would prevent a city ordinance from naming an outside agency to act as registrar, if it seemed desirable. Bonds of both issues were registerable as to principal only, but that, too, is a mere coincidence.

The trustee was instructed in the indenture to authenticate

[28] Little Rock, Arkansas, Indenture, p. 9.

and deliver the bonds after the receipt of certain certificates and legal opinions. It was also prescribed that the trustee should deliver the bonds to the purchaser named in the mayor's certificate, but only against payment. The trustee was thereupon to turn over the payment to the depository as named in the city treasurer's certificate, the payment to be placed in the Water Supply Construction Fund, the first of six funds mentioned in the indenture. Payments out of the water supply construction fund could be made by the city treasurer, to the extent of the cost of construction of the new water supply system, including the incidental engineering, legal, and other expenses. But no payment could be made without a consulting engineer's certificate of approval. All moneys paid as accrued interest on bonds issued were to be placed by the city treasurer in the Water Revenue Bonds Fund, while a third fund, the Water Purchase Fund, was also created, into which that portion of the issue's proceeds which were to be used to purchase the existing waterworks system were to be placed.

Rates ranging from 30 cents per 100 cubic feet for the first 6,700 cubic feet used per month or less, down to 3.75 cents per 100 cubic feet for all water over 1,333,300 cubic feet used in any month, were ordered, with a 5 per cent discount allowed for prompt payment. The discount applies only on that part of the monthly consumption not exceeding 6,700 cubic feet. The city itself agreed to pay for water hydrant privileges at the rate of $35 per hydrant per annum, and to pay at the rate of 10 cents per 100 cubic feet for whatever water it drew for non-fire purposes.

In general, the rates to be paid by both the private users and by the city could not be reduced until the bonds and interest coupons had been paid or provided for, and the rates were to be raised whenever necessary to provide for the principal, depreciation, operation, and maintenance charges. However, if the water revenue bonds fund had an excess balance equal to a year's total of principal and interest, rates might be reduced, but only in case the new rates gave promise of equaling all requirements as evidenced by the previous three years' requirements, and in no case could the rates be reduced to less than 66⅔ per cent of the initial rates charged, as long as any of the original bonds were outstanding.

If the bills were not paid within 20 days from the billing

date, a penalty of 10 per cent was to be added, and if not paid within 30 days "service shall be discontinued." If service is discontinued due to nonpayment of bills, "the premises shall be disconnected from the water-works system."

All revenues were to be placed in the Water Fund, the fourth fund prescribed, and the revenues were pledged to the payment of the principal and interest on the bonds, and operation and maintenance expense, and to the providing of an adequate depreciation fund. The city treasurer was instructed to make transfers from the water fund to the water revenue bonds fund beginning February 1, 1937, and continuing monthly until January 1, 1947, at the rate of 110 per cent of the succeeding semi-annual interest payment and the same proportion of the next annual principal payment due. When and if the water revenue bonds fund should contain a balance sufficient to retire all the remaining bonds and interest coupons, no further payments would be required.

The city treasurer was further instructed to transfer 5 per cent of the moneys remaining in the water fund, after making the required payments to the water revenue bonds fund, to a Water System Depreciation Fund. Such transfers were to be used solely to pay for the cost of replacements. This payment bears no fixed relation to the capital involved or to the earnings that may be realized.

Amounts still remaining in the water fund are to be paid into a Water System Operation and Maintenance Fund, the last of the six funds mentioned, on the first day of each month, as long as any of the bonds issued under the indenture shall be outstanding. Provision is also made for the redistribution of unused surpluses found in the various funds.

The city promised to complete the construction project as quickly as possible, and to require performance bonds of all contractors where the amount involved exceeded $2,500. It also promised to manage the waterworks system efficiently, to pay any and all taxes levied, not to create or permit any lien other than that securing the bonds to continue for more than 60 days, to carry insurance of various kinds, to keep separate records on costs of acquired and constructed properties, and to provide occasional audits.

The indenture prescribes what shall be considered to be a default, and if such occurs the trustee is given permission to

declare, and in case holders of bonds amounting to 20 per cent of the outstanding total present a written request, must declare, all the unmatured bonds to be due and payable. This is another evidence, therefore, of the attempt to adapt a corporate form to the municipal field. The conditions under which the trustee may, or must, act to foreclose the mortgage or to apply for the appointment of a receiver are likewise set down.

Conclusions on the use of indentures. Indentures as currently used are not perfect, but the defects do not seem to be sufficient to invalidate the use of the instrument altogether. Too often the trustee is located in the vicinity of the borrower and, therefore, likely to be a bank or trust company more friendly to the borrower than to the creditors whom it purports to represent. But this simply means that the trustees should be carefully chosen, and, preferably, should be situated in a state other than that of the debtor, in which case the trustees have a clearer right than otherwise to proceed against the debtor in a Federal court—no mean advantage.

Again, the fact that the trustee is frequently slow to act in the interests of the bondholders need not be a necessary state of affairs. Stricter provisions governing the actions of the trustee could be inserted in the indentures. To date, the indentures have been drawn largely to suit the trustee and the debtor. Of course, it is to the interest of the trustee to be charged with a minimum of responsibility. William O. Douglas, former chairman of the SEC, was reported as saying:

> It is clear from two years of experience under the securities act since the publication of our report on trustees under indentures that even the fullest disclosures of the terms of an indenture is not sufficient to bring about the necessary improvements, and that the desired objectives will not be attained so long as the form of the indenture is determined exclusively by the conventions of the obligor and its underwriters.
>
> Years ago the states recognized the similar plight of the purchaser of insurance, and laws were enacted to standardize the contents of insurance policies. This bill seeks merely to do for the bond buyer what the states long ago did for the insurance buyer.[29]

What Mr. Douglas said was aimed particularly at private corporation indentures, but, since the revenue bond indenture is a direct adaptation to the municipal bond field of the private corporation device, his words are equally pertinent here, as are

[29] *New York Herald Tribune,* April 26, 1938, p. 25.

also his specific recommendations: that the issuer be required "To furnish reasonably informative periodic reports to the trustee and to the bondholders, and to furnish to the trustee adequate evidence that the issuer has actually performed its more important obligations under the indenture. . . . The trustee would be required to notify the bondholders of a serious default, and, in the critical period between the occurrence of such a default and the organization of the bondholders for the protection of their own interests, the trustee would be under a duty to take such action as it would take if its own investment were at stake." [30]

Insurance

Another pre-sale provision of importance to the bondholders is the matter of insurance. The importance of this protection will vary with the type of revenue project supporting the bonds. In the case of a sewer system, the danger of critical damage being done to the system may be remote, whereas with a toll bridge it may be quite real.

Not infrequently the authorizing statutes name insurance as being a proper matter as to which the authorized body may covenant. In other cases the authority may be conveyed in more general terms. The bond resolution or ordinance itself may likewise be general or specific in regard to the matter of insurance.

Dakota County Missouri River Bridge

Policies	*Amount*	*Rate per $100*
Toll Bridge		
Property	1,000,000	$.80*
Tornado & Windstorm	50,000	.20
Fire	50,000	.50
Use & Occupancy	212,276	.875
Furniture & Fixtures	1,200	
Public Liability	100,000	.208
Employees' Bond	2,500	
Workmen's Compensation Statutory		
Robbery & Burglary	7,200	
Plate Glass		
Owner's Contingent Liability		

* To be reduced to $.60 following renewals and repairs to be made to the bridge by the county in its role of owner of the hitherto privately owned bridge.

[30] *Ibid.*

The above schedule of insurance, showing the types carried by one toll bridge, and the rates paid on the larger policies, will illustrate the insurance protection afforded to holders of bridge revenue bonds.

This insurance is carried with the standard companies and the large amounts are divided among several risk takers.

Supervision

The underwriters of municipal bonds have not been accustomed to giving much attention to supervising the debtor once the loan has been successfully floated. Whereas the underwriter of a private corporation's bonds may demand, and get, one or more seats on the board of directors, and in other ways follow the progress made by the debtor, the municipal bond houses have not felt called upon to supervise their loans in the interests of the investors, but have relied upon the supposedly perfect remedy available to the bondholders in the way of the right to a tax levy, and upon the investors' ingenuity in making use of it. More concern over the loans would certainly have been in order in the case of some of the quasi-municipal bonds floated by special districts in the past, and may be desirable in the case of certain revenue bonds in the future.

What is the likelihood that the underwriting bond houses will supply this supervision? Very little, as far as any present tendency shows. No "trouble shooting" organization seems to be in the process of formation. A competent consulting engineer who would periodically visit the various projects financed by the underwriter should be worth his salary to a bond house that was handling a moderate volume of utility revenue bond originations. The time to check up on the debtor is at the time, prior to the default, when collections begin to lag, or when the debtor first begins to divert funds, alter rates, or neglect maintenance. Even the trustee, if there is one, can scarcely be expected to know about such factors in time to prevent their normal consequences.

CHAPTER V

Revenue Bonds and the Market

IF THE work preparatory to a public offering of revenue bonds has been well done, the underwriting house will have satisfied itself that the proposed project will be a financial success, and will have determined that the would-be borrower (1) has the legal right to issue the bonds, (2) has conformed to all the legal requirements in respect to the issue, (3) has made such covenants concerning its future management of the property, and relative to the rights of the bondholders in case of later difficulties, as seem desirable, and (4) is willing to meet the current market requirements as to the interest rate, maturities, call features, and the like.

When the borrower has thus presented an acceptable offering, it becomes the task of the underwriting banking house to distribute the bonds to the general public. It may do this all alone, if the issue is small; but if the issue is a large one, the underwriter is more likely to form a syndicate or selling group to carry out the actual distribution.[1] As a matter of fact, it is common, in the case of the largest revenue bond issues, to have even the original underwriting done by a group of associated investment bankers, just as in the case of the large general obligation issues.

Whereas in the case of the orthodox full faith and credit bond a syndicate may grant concessions of an "eighth" or a "quarter" (*i.e.*, \$1.25 or \$2.50 per \$1,000 bond) to dealers and other preferred accounts, the reduction may run as high as one and one-half or even two points (*i.e.*, \$15 or \$20) on unusual revenue bond issues, when missionary work is required to effect the distribution. These concessions, as is true also of the "spread" between the price received by the borrower and that

[1] For a description of the various types of underwriting syndicates and selling groups see Arthur Galston, *Security Syndicate Operations* (Ronald Press Company, New York, 1928). But note the recent changes in practice, as a result of the SEC's activities.

paid by the investor, will decrease in size as the buying public becomes better acquainted with the revenue bond method of financing.

Comparative Prices

That the public has already accepted revenue bonds as an orthodox type of financing is indicated by Table 3. In some cases, the prices of hypothetical general obligation bonds have been calculated for the purposes of the table, where there are no existing general obligation bonds having the identical rate of interest, or life term, or both, that pertain to the revenue bonds. No comparison of bonds where these factors differ is valid. It will be noticed that, in the cases of water bonds, one water revenue bond (Little Rock, Arkansas) sells at a considerably higher price, *i.e.*, on a lower yield basis, than do the comparable general obligation bonds. In another case (Utica, New York), the general obligation bond holds the superior position marketwise. In general, on the basis of the few cases shown here, one may be justified in saying that water bonds secured solely by a pledge of water revenues sell on very nearly the same basis as the comparable general obligation bonds of the same municipalities.

As much cannot be said of the electric revenue bonds. These seem clearly to suffer by comparison with the relevant general obligation bonds. The importance of the utility concerned, in any evaluation of a city's revenue bonds, is emphasized by the contrasting relative positions of Seattle's water revenue bonds and its electric light and power revenue bonds, when these bonds are compared with the city's general obligation issues. Whereas Seattle's water revenue bonds appear to be superior, the electric revenue bonds are inferior to the general obligation bonds marketwise. The city's street railway revenue bonds would make a still poorer showing, relatively.

All this makes it difficult to talk of revenue bonds as if they were a single, uniform group. A city's water revenue bonds may be first grade, while its gas revenue bonds, say, may be second or third grade, or the relationship may be exactly reversed, with the gas bonds the superior issue. Again, one city's water revenue bonds may be superior, and another's inferior, to the comparable general obligation bonds, as noted. Each city and each utility are separate enterprises, in a sense,

TABLE 3

PRICES OF GENERAL OBLIGATION AND REVENUE BONDS COMPARED
(As of October 15, 1938)

	Revenue Bonds				General Obligation Bonds		
	Type	*Interest Rate*	*Maturity*	*Prices*	*Interest Rate*	*Maturity*	*Prices*
Chicago, Ill.	Water Rev.	3s	1957	102¼	*3s	1957	104½
Fort Worth, Texas	Water Rev.	4¾s	1958	120	4¾s	1948	116¼
Grand Rapids, Mich.	Water Rev.	3s	1958	100½	*3s	1958	102⅞
Little Rock, Ark.	Water Rev.	4s	1958	103¼	*4s	1958	95
St. Louis, Mo.	Water Rev.	4½s	1949	122½	4½s	1949	123⅝
San Antonio, Texas	Water Rev	5½s	1958	128¾	*5½s	1958	128¾
Seattle, Wash.	Water Rev	4¼s	1953	116⅞	4¼s	1953	108¾
Springfield, Ill.	Water Rev.	4s	1958	124	*4s	1958	124
Utica, N. Y.	Water Rev.	2¾s	1958	101⅜	*2¾s	1958	111¼
Danville, Va.	Elec Rev	4s	1958	112⅜	4s	1958	120½
Jacksonville, Fla.	Elec. Rev.	2½s	1949	102⅞	*2½s	1949	101⅞
Knoxville, Tenn.	Elec. Rev.	3¼s	1958	96⅝	*3½s	1958	84⅛
Los Angeles Dept. W. & P.	Elec. Rev.	3½s	1977	99	*3½s	1977	104
Seattle, Wash.	Lt. & Pr Rev	5s	1956	107¾**	5s	1956	116⅜
Springfield, Ill.	Elec Rev.	2.9s	1949	100½	*2 9s	1949	106
Buffalo Sewer Authority	Sewer Rev.	3½s	1958	102⅛	3½s	1958	104⅜
Fort Wayne, Ind.	Sewer Rev.	3½s	1958	106	*3½s	1958	119¾
Davenport, Iowa	Bridge Rev.	4s	1954	104†	*4s	1954	120⅝
Louisville Bridge Comm.	Bridge Rev.	3s	1955	102†	*3s	1955	111¾

Source: Quotations furnished by Stranahan, Harris and Company, Incorporated, and by Brown, Harriman and Company, Incorporated, both of New York City.

† Callable. Market appears to be affected by call price

* No bonds of this description actually outstanding.

** Sixth charge obligation.

and successful performance of the governmental or of the proprietary functions in any one city is no guarantee of equal success in another.

To those who pay attention to ratings it may seem significant as an indication of the merit of revenue bonds that a survey of sixteen cases, in which both the revenue and general obligation bonds of the same municipality were rated by the Moody service,[2] showed that the revenue bonds received the higher rating eight times, in seven cases the two types were rated alike, and in only one case were the general obligation bonds given a superior rating. Where the revenue bonds were given a preferred rating it was, with one exception, always just one grade better.

Advertising

The investor's first, and, in many cases, only source of information concerning the basic facts of a revenue bond issue, is the newspaper advertisement. If the issue is at all attractive, there will seldom be time enough after the appearance of the public announcement, and before the issue is distributed, to secure a circular or prospectus of the issue, and to ponder the details there disclosed. For this reason it is especially important that the advertisements should present an accurate summary of the salient features of the offering. They have not always done so.[3]

An advertisement that was published in connection with an offering of electric light plant revenue bonds by the city of Seattle, Washington, in 1935, is a particularly flagrant example of what such an advertisement ought not to be.[4] The notice was headed:

$1,500,000
CITY OF SEATTLE, WASHINGTON
Municipal Light and Power Refunding Bonds
1935—Series "LS-1"
4% Bonds

[2] These were all the cases, except for Seattle and Tacoma. Because of the existence of various utilities, and variously secured issues of the same utility in these two cities, with a resulting wide range in ratings, these cities could not be classified.

[3] Financial advertisements of public bodies are not directly subject to the SEC. For such control as the SEC has, see Footnote 7.

[4] *The New York Times*. July 30. 1935. p. 29.

It will be noticed that the word "revenue" appears nowhere in the title, nor did it appear elsewhere in the announcement. One unacquainted with the particular method of financing the electric light system in Seattle might easily have supposed that this was an offering of a general tax obligation to raise funds for the electric light system's needs, just as the title "water bonds" is used primarily for identification purposes, in connection with financing that is to be supported solely out of taxes, with no lien on the revenues. Actually the issue is only an obligation of the city's department of lighting, to be serviced solely from the revenues.

Secondly, where the obligation is not payable out of taxes to be levied on all local property, the name of the city doing the borrowing is less important than in those cases in which the bonds are general obligations of the community. The financial outlook for the revenue-producing enterprise may be of equal or even greater importance than the name of the city. Yet, in this advertisement the name of the city was placed on the second line, and every letter capitalized.

In the third place, no information was given about the relative position occupied by the holders of this particular series, LS-1—this in spite of the fact that a special fund is created out of the gross revenues which are not already pledged, in order to provide for the payment of interest and principal on each new series of bonds. Thus the various series do not rank equally, and the different series of issues are entitled to payment only in accordance with the date of the establishment of their respective funds. This means that the bonds serviced from the twelfth fund, for instance, are in effect junior to the preceding 11 issues. Not only that, but refunding issues do not necessarily continue the relative position of the bonds which they refund, but, as before, are payable in accordance with the date of the establishment of their payment fund. This date may be subsequent to the dates at which funds were established to pay issues sold at a time later than that at which the original issue that is being refunded was sold.[5] Thus the omission in the advertisement of any mention of the relative position of the series LS-1 bonds was the omission of a factor of vital investment importance.

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[5] See *Moody's Investors Service Bulletins,* June 9, 1937 and Sept. 1, 1937.

school uses nearly as elaborate prospectuses as those used for private corporation issues. The law is less specific regarding the content of municipal bond circulars than it is in respect to the content of private corporation circulars, and both the short and long types are permissible.[7] It appears that those houses which do a private corporation bond business, and thereby become accustomed to conforming to the elaborate requirements of the SEC in respect to those issues, make a practice of giving extensive information in the municipal field also, while those which do strictly a municipal bond business do not prepare very long documents. If the extensive information is, on the whole, advantageous to the investors in the private field, it may be equally desirable in the public field. That not every investor would make profitable use of the information does not seem a conclusive reason for withholding what are, or may become, vital facts.

Accounting

If revenue bonds are more akin to private corporation bonds than they are to municipal general obligation bonds, then that information which is customarily furnished, and needed, in a private utility offering circular, should be provided in the revenue bond circular. Yet, one prospectus of the city of Los Angeles, Department of Water and Power, dated June 25, 1936, carried only a much condensed balance sheet, and a second prospectus of the same department—this one dated December 1, 1937—carried no balance sheet at all, despite the fact that the prospectus ran to seven pages.[8]

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[7] Wylie Kilpatrick, in an article entitled "Federal Regulation of Local Debt," *Nat. Mun. Rev.* XXVI (June 1937), 290, points out three methods by which the SEC can nevertheless exercise some control over the sale of municipal securities despite their exemption from the requirements of registration: ". . . sales of municipal securities are subject to certain fraud sections of the acts and to the prohibition against fraudulent interstate transactions in securities by misrepresentation in the sale of securities or any practice operating as a fraud upon purchasers Three avenues are open for administration: first, the commission may define the devices deemed fraudulent; second, it may ask municipalities or purchasers for statements of fact; and, third, it may apply to the appropriate court for an injunction or restraining order." See The Securities Act of 1933, 48 stat. 74, c. 38 (especially sec. 17).

[8] In the second prospectus cited, reference is made to the "Official Statement" of the department, which document prospective investors are urged

Perhaps worse than the Los Angeles practice is the Seattle Department of Lighting's presentation, in a circular dated October 5, 1937, of an issue of $750,000 Series LU-5, 4 per cent light and power revenue bonds. The department included a condensed balance sheet in which all the current accounts were lumped together under the title, "Current Assets." No showing whatever was made as to the amount of ready cash that was included among the current assets. Furthermore, reference to the balance sheet, as of December 31, 1936, a period seven months prior to the date of the circular, shows that on that date "Construction Fund Cash" in the amount of $2,800,-784.95 was included among the current assets. Insofar as that fund was earmarked for construction, it would not be available for other current needs, including payments on maturing principal and interest. It is also noteworthy that five of the current asset accounts set down in the annual balance sheet consisted of loans, or other receivables from various funds of the department including "Future Bond Issues." A second entry in the circular's balance sheet that might be open to criticism is the "Sinking, Redemption and Special Fund" asset account which shows a *credit* balance of $739,301.76. *Fund* accounts do not usually have a minus quantity for a balance.

Another improvement in prospectus accounting would be a standardized form of operating statement, in which depreciation, amortization, bond discount, and similar accounts would not be lumped together in such a way that the amount attributed to each item becomes indistinguishable.

The Securities and Exchange Commission and Revenue Bonds

In addition to the methods that have already been indicated by which the SEC can, at the present time, exercise some control over the marketing of municipal bonds (which methods are as applicable to municipal revenue bonds as to municipal general obligation bonds, of course), there is always the possibility that the degree of control which is exercised will be ex-

to consult. The official statement does furnish a balance sheet, but such an important financial statement would seem worthy of being inserted in the seven-page prospectus, which is the only relevant document that many investors ever see, if they see that.

tended. This may come about indirectly, by increased control of over-the-counter trading under present statutes, or directly, by an amendment which would put the now-exempted municipal bonds under the control of the SEC.

The recent so-called Maloney Bill[9] was, in some of its phases, an attempt to amend Section 15 (c) of the Securities Exchange Act of 1934 in order to give the SEC more power over "manipulative, deceptive, or otherwise fraudulent" practices, even if the acts complained of were perpetrated by municipal bond dealers. Opposition by the municipal bond dealers effected deletions of those parts of the bill that were most offensive to them.

There is also the possibility that revenue bonds may, at some future date, be singled out for special SEC control, even though the general obligation securities continue to be free from regulation. An organization that is designed to protect the public might well distinguish, in its supervision, between bonds that are payable solely from the revenues of particular projects, of varying worth, and those that are backed by the plenary taxing power of the political body concerned.

Purchasers

Municipal bonds as a class find a goodly part of their market in the needs of the large institutions such as commercial and savings banks, life insurance companies, endowment, foundation, and other trust funds.[10] It has been estimated that at least 30 per cent of all municipal bonds are owned by such concerns and other large industrial corporations.[11]

General obligation bonds of political units are by statute expressly made eligible for investment by national banks and state banks that are members of the Federal Reserve System.[12] On October 27, 1936, however, the Comptroller of the Currency ruled that, since revenue bonds were not general obligations, they were not exempt from the statutory requirements that certain types of bonds must possess such characteristics as he

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[9] 52 Stat. 1070, c. 677 (June 25, 1938). See sec. 2, especially.

[10] Consult Poor's *Institutional Holdings of Securities* (annual).

[11] *Securities Exempt from Federal Income Tax as of June 3, 1937* (U. S. Treasury Dept., Wash., D. C., 1938), p. 113.

[12] U. S. Revised Statutes, sec. 5136, par 7.

might prescribe in order to be eligible investments for national banks or state banks that are members of the Federal Reserve System.[13] On the same date the Treasury issued a list of security types that were considered ineligible,[14] and revenue bonds were not included. The situation comes to this: particular revenue bonds may be classified as eligible investments by the Comptroller, although he might, in the exercise of his discretion, hold that other revenue bond issues were not eligible.[15] In any case, revenue bonds would be subject to the limitation from which general obligation bonds are exempt—that no more than 10 per cent of the bank's capital and surplus may be invested in any one issue.[16]

In the cases of nonmember state commercial banks, the eligibility of revenue bonds for investment would be governed by the local statutes. Not many states regulate the investments of their commercial banks.[17] This freedom from regulation contrasts with the strict limitations surrounding the investments of the state savings banks.

There have been a few opinions by attorneys general and at least one court decision dealing directly with the eligibility of revenue bonds for bank investment in those states in which there are laws governing the investments of commercial banks. Under the Indiana law commercial banks are not supposed to invest in municipal securities that are not the "direct obligations" of the issuers. The attorney general of that state has ruled that revenue bonds are not direct obligations of their sponsors, and are, therefore, not eligible bank investments.[18] A Michigan court has held that revenue bonds are not legal investments to the "same degree that state bonds are," [19] but did not make clear in what degree they were legal investments. On the other hand, the attorney general of Minnesota has held

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[13] *Treasury Dept. Bulletin,* Oct. 27, 1936, par. 91. Quoted in Prentice-Hall *Federal Bank Service,* ¶ 2150.91.

[14] *Ibid.,* par. 86. Quoted in Prentice-Hall *Federal Bank Service,* ¶ 2150.68.

[15] The new Regulation, effective July 1, 1938, did not alter the 1936 status of revenue bonds.

[16] Correspondence with the U. S. Treasury Dept., dated July 6, 1938.

[17] In a few states, e.g., Ohio, commercial banks and savings banks operate under the same law Revenue bonds are not eligible investments for commercial banks in such cases.

[18] Indiana, Acts (1937), c. 33, sec. 18, as interpreted by the attorney general, May 6, 1937, reported in *CCH Banking Law State Service,* 122: 7421.

[19] Attorney General v. State Bridge Commission, 277 Mich. 373, 383, 269 N. W. 388, 391 (1936).

that certificates of indebtedness payable from a special fund are legal investments for banks.[20]

The state law, where there is one,[21] usually requires that municipal bonds, to be eligible investments for savings banks, must be direct obligations of the issuing community and payable out of taxation. This may not always be very clearly stated in the law, but correspondence with most of the superintendents of banking in the northeastern states has not revealed a single instance in which the law has been interpreted in a way to allow savings banks to buy revenue bonds—barring express statutory authority.

This express permission is occasionally given, but it is usually confined to revenue bonds of a particular local body, or of one that is operating between the immediate state and an adjacent one. In such cases the initiative for the permission frequently comes from those who wish to improve the market for bonds that are being issued in connection with some extensive new development. Thus, separate New York statutes have specially authorized the investment of savings bank funds in the revenue bonds of more than 20 authorities, including those of the Buffalo Sewer Authority, the Lake Champlain Bridge Commission, and the Port of New York Authority. New Jersey has given savings banks special permission to invest in the revenue bonds of the South Jersey Port District, Delaware River Joint Commission, Port of New York Authority, and the Gloucester County Tunnel. Both states permitted investment in the Home Owners' Loan Corporation bonds that were guaranteed only as to the interest, and, therefore, are considered to have been revenue bonds as to the unguaranteed principal.

The best examples of general statutes that permit savings banks to buy revenue bonds are found in the states of Washington and California. The former state enacted a law,[22] in 1937, that makes water and sewer revenue bonds eligible investments provided the entire net revenues are irrevocably pledged by way of security. The California law declares rev-

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[20] 122 *CCH* 7421.

[21] The orthodox savings bank is not found in every state, and in some states, though found, it is rare; therefore, in several of the states there are no specific statutes governing investments of savings banks.

[22] Laws (1937), c. 95, secs. 3 and 6.

enue bonds to be eligible investments when issued for public utility purposes by any city or county with a population of not less than 25,000, but only if the net income meets certain specifications and if the superintendent of banking certifies the issue.[23]

It is evident from the current New York law that no bonds that are issued after 1938 and that are not supported, to some extent, at least, by the faith and credit of the issuing body, will be eligible for savings bank investment,[24] but while the words "faith and credit" are used in describing those obligations of New York municipalities and nonadjacent states that are eligible investments, the phrase, or a similar one, does not appear in the subdivisions describing eligible obligations of municipalities in adjacent states. In 1930, Hamilton Ward, the then attorney general for New York, rendered an opinion that New Mexico Highway Debentures, which were to be serviced only out of gasoline revenues, were not eligible savings bank investments, "since it is the full faith and credit of the state without qualification which must be irrevocably pledged to the payment of both principal and interest in order to constitute them obligations of a state." [25] According to this interpretation of the word "obligation," revenue bonds of municipalities in adjoining states are not eligible.[26]

The Massachusetts Office of the Commissioner of Banks, after stating that its attitude has likewise been antagonistic to the purchase of revenue bonds by savings banks, despite their apparent technical eligibility, goes on to acknowledge that the statute "could be more specific in this respect." [27] The Maine law is also singularly silent in respect to the "faith and credit" backing required for obligations of municipalities located in adjacent states, and, in this case, also in respect to the obligations of municipalities located in more distant states. The barrier, on the whole, seems to be more administrative than

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[23] Stat. (1937), c. 341, sec. 1

[24] See New York Consol. Laws (1938), c. 2, sec. 235, subdivision 5 (f).

[25] Opinion rendered to the Hon. Joseph A. Broderick, the then superintendent of banks, April 28, 1930.

[26] Apparently revenue bonds are not obligations of the issuing municipalities when it comes to eligibility for savings bank investment or when it is a question of what constitutes "indebtedness" within constitutional debt limits, but they are obligations of the municipality when it comes to tax exemption!

[27] Letter to the author, dated April 12, 1938.

statutory in character. This fact ought not to create any false optimism, however, as to the likelihood of changing the status of revenue bonds in respect to eligibility for savings bank investment. If pressure were brought to bear upon the state banking departments in an effort to secure changed administrative rulings, the net result would probably consist of amendments to the statutes that would definitely exclude revenue bonds from the lists of legal investments. Revenue bonds will no doubt be admitted to the legal lists eventually, but this will come about only after the public has become better accustomed to the relatively new type of obligation; even then the change will probably be accompanied by the introduction of some sort of grading or rating system for revenue bonds.[28]

The annual reports of the Comptroller of the Currency, and of the banking departments of the various states, do not ordinarily disclose the amounts or proportions of revenue bonds owned, but the annual report of the Superintendent of Banks in New York for the year 1936 does show that the savings banks of that state, at the end of the year, owned $3,616,725 of HOLC bonds on which the principal was not guaranteed, and $5,162,000 of The Port of New York Authority bonds. The combined holdings of both types of bonds showed an increase of about 25 per cent over the total for the previous year.

Passing from the question of the legality of revenue bonds for savings bank investment to the question of their legality for other types of institutions, we find, by way of contrast, that revenue bonds are eligible investments for almost all of the insurance companies. However, in those states in which insurance companies can legally buy common stocks (usually true only of fire and casualty companies), the low yield obtainable on municipal bonds causes even the revenue bonds to be ignored. On the other hand, life insurance companies cannot generally buy common stocks, and it was only in 1928 that New York lowered the bars to permit the purchase of preferred stocks.[29]

As of December 31, 1937, the $1,424,000,000 worth of munic-

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[28] An appeal that revenue bonds ought to be admitted to the legal list, and on terms and conditions no more onerous than those prescribed for public utility and railroad securities, was made Dec. 27, 1937, in an article in the *New York Herald Tribune*, p. 17.

[29] Laws (1928), c. 539.

ipal bonds that was owned by the 49 life insurance companies that do 92 per cent of the nation's life insurance business constituted about 5.9 per cent of their total admitted assets.[30] This total of municipal bonds owned is equal to about 7.5 per cent of all municipal bonds outstanding. The slightly higher income available on revenue bonds has caused them to be looked upon with favor by some of the life insurance companies, although at least one of the larger companies, the Equitable Life Assurance Society, still feels that the income to be derived from municipal bond investments is, by and large, less than can be had from other legal investments, and therefore does not make a practice of purchasing municipal bonds—either general obligation or revenue (see Table 4).

It appears from Table 4 that about 7½ per cent of the investments made by the so-called Big Five companies in the obligations of state subdivisions are revenue bonds, and that, of the five companies, the Prudential is much the largest purchaser, to date. When the investment in revenue bonds is computed as a percentage of the companies' total investments in all fields, the figure drops from 7½ per cent down to far under 1 per cent.

In glancing at the municipal portfolios of the smaller companies, the percentages that consisted of revenue bonds were found to run as high as 25 per cent, in the case of the Massachusetts Mutual company, and to 97 per cent, the record, in the case of the Connecticut General Life Insurance Company. The growth in the revenue bond holdings of the Mutual Benefit Life Insurance Company of Newark from $500,000 in 1929 to $8,047,000 in 1937 may be indicative of a more important place for revenue bonds in the future investment portfolios of insurance companies generally.

Revenue bonds are sometimes, perhaps usually, legal for trust funds, but they are not legal in Pennsylvania, which requires that the bonds be full faith and credit obligations, nor in New York, which sets up the same requirements for trusts in respect to municipal bonds as are provided in the savings bank law.

Revenue bonds are not authorized to be accepted by the government as security in connection with the deposit of

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[30] Proceedings of the Thirty-First Annual Convention of the Association of Life Insurance Presidents (no facts of publication), pp. 72 and 73.

TABLE 4

INVESTMENTS BY LEADING LIFE INSURANCE COMPANIES
IN THE OBLIGATIONS OF UNITED STATES POLITICAL SUBDIVISIONS
OF STATES, TERRITORIES AND POSSESSIONS
(EXCEPT STATE EDUCATIONAL INSTITUTIONS)
(As of Dec. 31, 1937)

Insurance Companies	*Total Statutory Authority and Municipal Bonds*	*Revenue Bonds (Including Authority Bonds)*	*Authority Bonds Only*	*Revenue Municipal Bonds Only*	*Total Admitted Assets*
Metropolitan Life	$96,834,225 56	$2,056,000.00		$2,056,000.00	$4,719,720,827.01
Prudential	108,250,313.00	17,064,000 00	$7,950,000.00	9.114,000.00	3.584,334,701 89
New York Life	149,624,243.08	8,260,000.00	. . .	8.260,000.00	2,520,350,216 36
Equitable Life	150,000.00	.		. .	2,105,542,759 00
Mutual Life	23,505,528.00	1,096,000.00	. . . .	1,096,000.00	1,368,850,468.59
Total	$378,364,309.64	$28,476,000.00	$7,950,000.00	$20,526,000.00	$14,298,798,972 85

Source: Annual statements of the respective companies.

postal saving funds in commercial banks, but any municipal bonds that are offered must be "general obligations . . . payable . . . without limitation to a special fund from the proceeds of taxes."[31] A movement is in progress to have this rule altered, but it would not now materially widen the market for revenue bonds, as the banks have greatly reduced their holdings of postal savings funds because of the requirement that they pay interest to the United States government on such deposits at a rate that is currently higher than the money is worth to the banks.

Endowment funds can be invested in revenue bonds, if the donor so specifies, or if he allows the exercise of full discretion. If the funds constituted a trust with no express instructions, the trustee would be governed by the instant state law which may or may not permit such investment.

Tax Exemption

It is well known that state and municipal bonds are exempt from Federal taxation, and vice versa. Ever since Chief Justice Marshall delivered his famous decision in McCulloch *v.* Maryland,[32] the doctrine has been in the making. The McCulloch case was not concerned with bonds, but the principle, in relation to bonds, was first expressly applied in 1829 in the case of Weston *v.* Charleston, 2 Pet. 449.[33] These two cases involved the attempt by states to tax instrumentalities of the Federal government, but the United States Supreme Court likewise supported the principle that state bonds are exempt from Federal taxation in the case of Mercantile Bank *v.* New York,[34] in 1887, and has consistently so held to date.

The same rule applies quite as well to the income derived from the bonds as to the property in the bonds, as such, and this despite the fact that the United States Supreme Court

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[31] *Regulations Governing the Deposits of Postal Savings Funds in Banks and the Acceptance of Bonds as Security Therefor,* Aug. 16, 1916, as amended.

[32] 4 Wheat. 316 (1819).

[33] I have relied here mainly on two recent brochures by Thomson, Wood & Hoffman, New York municipal bond attorneys. The titles of the brochures are: *Are Revenue Bonds Issued by States, Municipalities or Agencies Thereof Exempt from Taxation?* (New York, 1936) and *The Tax Exempt Status of State and Municipal Bonds* (New York, 1937).

[34] 121 U. S. 138 (1887).

might have interpreted the Sixteenth Amendment (the income tax amendment) as conferring power upon Congress to collect income taxes on income derived from state or municipal bonds, since the amendment, in part, authorizes Congress "to lay and collect taxes on income, *from whatever source derived*."[35] The Court, however, interpreted the amendment only as releasing Congress from the duty of making the tax proportional to the population of the respective states, and not as authorizing any new tax.[36]

It is sometimes said that the purpose—whether of a proprietary or governmental nature—for which a governmental body borrows money has a bearing upon whether the ensuing securities will be exempted or not. This argument did not impress the Supreme Court, back in 1914. At that time it declared that "the issuing of municipal bonds was the performing of a governmental function,"[37] thus, in effect, annulling testimony as to the use to which the proceeds of the bond issue were to be put. However, in two recent tax-exemption cases, although bond issues were not involved, the Supreme Court has been decidedly conscious of the nature of the function performed by the local body that was sought to be taxed,[38] and permitted taxation where the political unit concerned was not a governmental body, and where the function was not "essential." This change of mood is more threatening to revenue bonds, of course, than it is to general obligation bonds, since a larger part of the revenue bond use relates to proprietary, or nonessential functions, than is true of general obligation bonds.

In the first of the two cases to which reference has just been made, the case of Helvering *v.* Gerhardt, involving taxation of the income of a Port of New York Authority employee, the Court also asserted that Federal tax exemption should not be extended in those cases where the burden of the tax on the state is "speculative and uncertain."[39] If the same principle is applied to the taxation of municipal bonds, revenue bonds might fare worse than general obligation bonds, since the Court might well argue that the burden of the tax, in the case

[35] Italics added.

[36] Thomson, etc., *The Tax Exempt Status*, etc., p. 12.

[37] Farmers Bank *v.* Minnesota, 232 U. S. 516, 525 (1914).

[38] Helvering *v.* Gerhardt, 304 U.S. 405 (1938) and Allen *v.* Regents of the University System, 304 U. S. 439 and 590 (1938).

[39] 304 U.S. 420 (1938).

of revenue bonds, is not borne by the city as such, but by the users of the service.

The stress laid upon the nature of the function performed by the public body sought to be taxed has been even more pronounced in the case of Treasury Department rulings than it has been in the case of the court decisions. On August 18, 1936, the Deputy Commissioner of Internal Revenue ruled that, while the question of tax exemption was debatable, the operation of a toll bridge was not to be regarded as an essential governmental function of a state, and, therefore, the Marine Parkway Authority's bonds would be held liable for the stamp tax until a contrary court ruling should be made.[40] This and other similar expressions by the Department may warrant one in believing that the Supreme Court is being won over to the Treasury point of view that the nature of the function involved is a relevant matter.

But by no means is it true that all of the types of activities with which revenue bonds are commonly associated should be classified as "nonessential" functions of governmental bodies. The operation of bridges, highways, ferries, and street railways have been considered to be governmental functions by the courts in test suits, and the furnishing of water is readily conceded to be a proper function of a political unit, and one that it may engage in even while acting strictly in a governmental capacity.[41] Perhaps of most interest and importance at the moment is the assertion that "the construction of electric light plants has been held to be a public purpose in every State of the Union in which any one has troubled to raise the question."[42]

There have been a few explicit Treasury Department rulings dealing with particular revenue bond issues. The oldest and perhaps the most general ruling was one handed down in 1924 in connection with an issue of 6 per cent water revenue bonds. Still unreversed, it holds that:

> Interest on bonds issued by a municipality under a general statute for the purpose of providing funds for the installation of a municipal water system, which bonds and interest were payable only out of a special fund

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[40] See also *Internal Revenue Bulletin,* No. 19, May 9, 1938 (U. S. Govt. Ptg. Office, Wash., D. C.), p. 6 ff.

[41] Thomson, etc., *Are Revenue Bonds,* etc., p. 16.

[42] *Ibid.,* p. 18.

created through the setting aside of a certain proportion of the revenues of the utility, is exempt from Federal Income tax.[43]

Other and later rulings have exempted the interest on bridge revenue bonds issued by the Alabama State Bridge Corporation, by the city of Louisville and by the Kentucky State Highway Commission, all in connection with bridge bonds. The Alabama ruling was handed down in 1929; the Kentucky decisions in 1932.[44]

A fair statement, by way of summary, of the existing situation would note a present tendency upon the parts of the administrative, executive, and judicial branches of the Federal government to reduce the previous broad limits of tax exemption for securities issued by non-Federal units. This tendency is not observable in the legislative branch as yet. In some of its phases, the apparent threat applies equally to both general obligation and revenue bonds, but on the whole revenue bonds occupy the more precarious position, and, where issued in connection with nonessential functions, it may even be that they will be singled out for taxation, while general obligations bonds are left untouched.

Effects of a withdrawal of tax exemption. At first thought it might appear that the rate of interest offered in connection with new issues of revenue bonds would have to be raised to about the level of the rate offered on private utility bonds, if the tax-exemption feature of revenue bonds is removed on future issues.[45] However, there are other remaining advantages inhering in governmental enterprises that should still enable governmental bodies to secure their funds at less than the rates which private companies must pay. These advantages include (1) the possibility of pledges by the political unit to the operating expenses of the enterprise, (2) the possibility of later additional voluntary contributions, (3) certainty of the franchise, (4) protection from competition, and (5) con-

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[43] *Internal Revenue Bulletin,* Cumulative Bulletin III-2, July–Dec., 1924, p. 79.

[44] Thomson, etc., *The Tax Exempt Status,* etc., p. 27, and *Are Revenue Bonds,* etc., pp. 15, 16.

[45] For an exposition of this point of view, see an article entitled "Elimination of Tax Exempt Status of Municipals Would Create Problems," by Dr. B. C. Goss, *Financial Reporter,* IV (April 28, 1938), 265.

tinuing exemption from state and local taxation,[46] despite the loss of Federal exemption. Also in the somewhat different category of comparative advantages that might, or might not, exist, depending upon the circumstances, there would be the possibility of express stipulation that certain revenue bonds should be legal for bank, insurance, and trust fund investment, the relative efficiency of municipal ownership, and the general credit rating of the sponsoring municipality or statutory authority. The treasurer of an English city, Birmingham, thought that "the superior security offered by the local authorities" was itself enough to account for a rate of interest lower by 1 per cent than that paid by the private companies.[47]

[46] For a special treatment of the status of authorities, in case Federal tax exemption is withdrawn, see Hugo E. Hanser, "The Trend of the Authority in Public Finance," *Financial Reporter,* II (Dec. 3, 1936), 8.

[47] J. R. Johnson, "The Finance of Publicly Owned Utilities in Relation to the General National or Local Finance," *Public Administration,* IV (October 1926), 386.

CHAPTER VI

Defaults

THERE have been many instances, of course, in which attempts to issue revenue bonds have been halted before the bonds were placed in the hands of the investors. Joliet, Illinois; Warren Borough, Pennsylvania; Coeur d'Alene, Idaho; and Portage, Wisconsin, may be cited as losers in some of the more historic controversies respecting the validity of contemplated revenue bond issues.[1] Once issued, however, the record of revenue bonds has been good everywhere, except possibly in the state of Texas. Apart from defaults connected with loans made through Federal agencies, including the RFC, PWA, and REA,[2] there are only 10 known instances of revenue bond defaults throughout the 40 years of revenue bond history.[3] An eleventh public debtor has indicated that it will probably default. Of the 10 known instances referred to, two have been "cured" by action in accordance with the original terms of the agreements, no concessions being exacted from the bondholders; in another pair of cases, the bonds were declared void after they had been issued; in a fifth case, the revenue bond debt has been refunded to the accompaniment of concessions by the bondholders; and in the remaining five cases. the ultimate result is still in doubt. One of the 10 cases relates to street railway bonds, one to bridge bonds, while the rest are either water, or water and sewer, issues. Classified according to the political unit involved, all are municipal obligations, except one. That one is an issue of a state agency.

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[1] Appendix B contains a host of cases that resulted in court disapproval of proposed revenue bond issues.

[2] For defaults on loans made through Federal agencies, see Chapter VIII.

[3] For present purposes, any delay in the payment of revenue bond principal or interest beyond the due date is considered to be a default.

Defaults Unaccompanied by Loss

Of the two cases which were corrected without loss to the bondholders, one, that of the borough of Port Vue, Pennsylvania, was described at length in Chapter III.

The second concerned the city of Centralia, Washington. An issue of $300,000 6 per cent water revenue bonds, maturing serially from 1919 through 1938, had been sold in 1913 to a Seattle firm, at a discount from par of $42.25 per $1,000 bond. Later, after the State Bureau of Accountancy had criticized the city for selling the bonds below par, suit was brought against the corporation that bought the bonds and against the bondholders in an effort to have the bonds declared void on the ground of usury. The investment company was released by the court, during the course of the trial, from all liability—apparently on the ground that the statute of limitations had run against any right that might otherwise have been exercised against the corporation—but the bondholders were assessed a penalty of twice the amount of discount exacted by the banking firm and of twice the amount of interest that they had received.[4] This decreased the net worth of the bonds to about one-third of their face value. However, the court would not declare the bonds void, as it was requested to do. On appeal, the Washington Supreme Court reversed the lower court's decision, and ordered the suit dismissed.[5] The basis for the reversal was, primarily, the fact that, whereas the law permitted an annual interest of only 6 per cent on tax obligations, a special statute provided for an 8 per cent limit on special fund obligations. The effect of this decision was to validate the bondholders' securities, and they were eventually fully paid and discharged.[6] There was never any economic difficulty in meeting the obligations, and while the lawsuit was in progress the revenues from the water system were held in escrow, awaiting the outcome of the trial.

Void Bonds

Turning from this pair of cases that had a fortunate ending to the two representing the opposite extreme—of complete

[4] *Com. and Fin. Chron.*, CIX (Nov. 18, 1919), 2089.
[5] Cuddy *v.* Sturtevant, 111 Wash. 304, 190 P. 909 (1920).
[6] Letter from Centralia City Attorney, dated June 29, 1938.

loss—one finds that in the latter cases the courts both found that the bonds had been illegally issued and declared them to be void. The courts even refused to allow any recovery by the creditors for the value of the benefit conferred upon the debtor communities, other than the right to the salvage from ruined dams. Both of the incidents relate to Texas municipalities.

The first of the two instances, in point of time, concerned the city of Cross Plains. The city, pursuant to an ordinance dated December 11, 1929, had issued $67,000 of combined water and sewer revenue bonds to the Municipal Engineering Company, in part payment for "improvements" which the company at that time made to the city's water and sewer system. The improvements consisted of a new reservoir and dam, located some distance from the city, and a connecting pipe line. The Texas statutes relied on by the municipality related to the financing of "extensions." No election was held, it being generally supposed that under the Texas statutes, as amended,[7] no election was necessary.

The bonds came into the hands of a Mr. J. M. Radford and other holders, without their having any other notice of defects in the bonds beyond that provided by the statements contained in the bonds themselves, and by the knowledge of the applicable laws with which they were chargeable. After the dam gave way, the city brought suit in 1934 to cancel the bonds on the ground that the statutes, as amended, did not actually authorize the sale of revenue bonds for purposes of financing extensions unless an election was first held, although they purported to do so. The city lost the case in the district court, was then upheld by the Court of Civil Appeals,[8] and was again upheld by the Commissioner of Civil Appeals, whose finding was adopted by the state's Supreme Court.[9]

The reasoning of the latter two bodies did not hinge on the validity of the state law dealing with extensions, but centered about the conclusion that the reservoir and pipe line that had been constructed were improvements rather than extensions.

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[7] Revised Statutes (1925), Arts. 1111, 1112, and 1113, as amended by Acts (1927), c. 194.

[8] City of Cross Plains *v.* Radford, 73 S. W. (2d) 1093 (Tex. Civ. App. 1934).

[9] Radford *v.* City of Cross Plains, 86 S. W. (2d) 204 (Tex. Com. App. 1935).

There was admittedly no authority to sell improvement bonds without a majority vote of the qualified electors.

The Commissioner of Civil Appeals intimated that the bondholders might repossess the reservoir and the pipe line, but the district court had already found them to be practically worthless.[10]

The second case of a void issue is likewise a Texas municipality, Hamlin. This case had originated as a suit instituted by the Brown-Crummer Investment Company to establish the validity of, and to recover on, an issue of Hamlin waterworks revenue bonds in the sum of $115,600 under a deed of trust executed March 15, 1929.[11] There were three parallels to the Cross Plains case: no election was held, the bond issue was for the purpose of making possible a reservoir, dam, and pipe line, and the bonds were first issued to the contractor. And again the improvements turned out to be practically worthless. "The new dam was built on a gypsum bed which failed with the first rain." [12] What little salvage there was had been disposed of, and the proceeds placed with the court,[13] prior to the date of the trial.

This was a Federal court case, and the same attorneys that had appeared for the city of Cross Plains this time represented the city of Hamlin, and naturally made use of the arguments that had impressed the Texas upper courts in the previous case. They argued, among other things, that if the additions to the Hamlin plant were extensions, then the bonds were improperly issued, because of the failure to hold an election, and if the additions were improvements there was admittedly no justification for the issuance of the bonds. The court agreed with the contentions of the attorneys for the city, emphasizing especially the fact that the additions were improvements. Generalizing, the court declared "contracts attempted to be entered into and bonds issued in violation of [constitutional and statutory] provisions are nullities, and may not be recovered on, and neither will acts done in violation of such prohibitions give rise to an action on quantum meruit." [14] In

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[10] *Ibid.*

[11] City of Hamlin *v.* Brown-Crummer Investment Co., 93 F (2d) 680 (C.C.A. 5th, 1937).

[12] 93 F. (2d) 682

[13] *Ibid.*

[14] *Ibid.*, 685.

other words, the bondholders could not even recover from the city of Hamlin in an equity action based upon an independent determination of the amount deserved by the plaintiff.[15] A rehearing was denied January 21, 1938,[16] and a petition to the United States Supreme Court for a writ of certiorari was refused April 11, 1938.[17] This left the bondholders without further remedy.

Default with Moderate Loss

The revenue bond default, which resulted in the bondholders receiving something less than they were originally promised, stemmed from an Alabama bridge loan. The Alabama State Bridge Corporation had been formed by the state in 1927 to construct 15 highway bridges. In pursuance of this object the corporation sold $5,000,000 of 6 per cent bridge revenue serial bonds maturing up to 1940. Payments of interest were maintained on the bonds with no reduction from the 6 per cent rate until December 1, 1936, but from 1933 on, serial principal payments were not met promptly.

Finally, a plan of readjustment was evolved whereby most of the bondholders[18] surrendered their 6 per cent bonds in exchange for 4 per cent bonds. These new bonds were secured by the pledge of income to be derived from a lease to the State Highway Department of the corporation's bridges, the annual rental not to exceed $300,000. At the same time the serial maturities were postponed by as much as 12 years.[19] The bonded debt outstanding had been reduced, as of July 14, 1937, from the original $5,000,000 to $3,295,000.

Defaults with Amount of Ultimate Loss Uncertain

In five instances of revenue bond default the ultimate amount of loss is still an unknown quantity. One of the five

[15] For a case in which a constructive trust was imposed for the benefit of the bondholder although the bonds (general obligations) were invalid, see Nuveen *v.* Board of Public Instruction of Gadsden Co., Florida, 88 F. (2d) 175 (C.C.A. 5th, 1937).

[16] 93 F. (2d) 680.

[17] Order No. 867.

[18] Ninety per cent according to *Moody's Manual, Governments and Municipals: 1937*, p. 103.

[19] For further discussion as to the causes of the default and the equity of the adjustment, see pp. 246–248, where this agency is treated at length.

is currently involved in litigation, a second is being refinanced, a third awaits the outcome of street railway operations, and the exact status of the fourth and fifth is unknown.

Herrin, Illinois. The oldest of the five defaults is the one that is in process of being refinanced.[20] It concerns the city of Herrin, Illinois, and goes back to 1928. In 1925 that city issued $640,000 of 6 per cent water certificates of indebtedness to mature serially from 1927 to 1950. The certificates were secured by a mortgage and pledge of net earnings.

> It developed that the net income of the waterworks system was not sufficient to pay the 6 per cent interest on these outstanding Certificates together with the principal. The latter part of 1928 the City leased its municipally owned waterworks system for a rental of $1.00 a year to a nonprofit corporation organized by the holders of these Certificates of Indebtedness.[21]

This corporation was to operate the system for the benefit of the certificate holders, and in accordance with that objective it paid all the interest coupons up to and including September 1, 1932.

Upon petition of the city,[22] receivers were appointed for the property March 6, 1936. The court appointees continued to operate the plant until a recent readjustment caused the city again to be put in possession of the plant. Meanwhile, the receivers retired $5,000 face value of the certificates and made one more semiannual interest payment, the one due March 1, 1933. This brought the principal amount of the debt outstanding down to $635,000, but there was about $152,000 in back interest due, making a total of $787,000 owed to the bondholders, as of early 1938.[23] Net income, before interest and taxes, has been about $35,000 during 1936 and 1937.

Recently, it was announced that the city had accepted an offer to refinance the $787,000 of water debt "for $433,000, of which $390,000 will represent new bonds and the other $43,000

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[20] It may be that there are other instances of defaults on Illinois water certificates issued under the early legislation. This is the only case, however, that actually came to light in the course of investigation. Even this one does not appear in Hillhouse's *Defaulted Municipal Bonds* (Mun. Fin. Off. Assn., Chicago, 1935).

[21] Letter from A. S. Huyck and Co., Chicago, Ill., dated June 9, 1938. This company was not a party to the original financing.

[22] See Deposit Agreement, City of Herrin, Illinois, 6 per cent Water Certificates of Indebtedness, dated Dec. 1, 1936, p. 2.

[23] *Financial Reporter,* IV (Feb. 25, 1938), 283.

taken from funds on hand for brokers' fees. The refunding bonds will bear 4¼ per cent interest." [24]

In the fall of 1937 the bondholders were asked by C. W. McNear and Company, Chicago investment banking firm, to deposit their bonds with the Colonial Trust Company, Pittsburgh, Pennsylvania, and to grant, simultaneously, to the investment banking concern an option to buy the certificates at 45 per cent of their face value, with no allowance for accrued interest.[25] If all of the bonds were turned in at that figure, the bondholders received about $285,750 for their $787,000 claim, while the city issued $390,000 of new 4¼ per cent bonds, and paid out $43,000 in cash, in order to retire the nearly $800,000 liability.

Since the system was actually operated from 1928 to 1936 by the bondholders, through the medium of the nonprofit corporation, and by receivers from 1936 to 1938, foreclosure might have been a futile remedy. However, it is interesting to note that the right to compel foreclosure was practically useless in any case. The mortgage covered only the additional source of supply and the filtration plant. Since neither the distribution system nor a second available source of water supply was included under the mortgage, foreclosure would probably have given the bondholders a supply of water which they could not transport or sell. One informant wrote that after several years of operation the city officials had decided that they could obtain sufficient water supply from their old source and not pay the bonds, although the water department had made money.

The mortgage deed of trust included the usual covenant to the effect that such rates as might be necessary to provide for the prompt payment of the principal and interest on the certificates, as well as operating and maintenance charges, would always be maintained. This covenant, like the mortgage, seems to have contributed nothing to the security of the bonds.

In many ways this seems the most inexcusable of all the defaults described in this chapter and the most subject to criticism in its various aspects.[26]

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[24] *Ibid.*

[25] The Fidelity Trust Company of Pittsburgh had been named depositary in an agreement dated Dec. 1, 1936.

[26] See *Com and Fin. Chron.*, CXLVI (April 2, 1938), 2247, where the readjustment provisions are given, including a provision that the city may keep

Seattle, Washington. One of the few street railway revenue bond issues in this country is that of the Seattle system. In late 1918 the city agreed to purchase the local system from the Puget Sound Traction, Light, and Power Company for the sum of $15,000,000. In payment the city turned over to the Traction Company 5 per cent serial bonds, due annually at the rate of $833,000 every March 1, from 1922 to 1939. The $8,336,000 of unretired bonds out of the original $15,000,000 are still owned by the company, now known as the Puget Sound Power and Light Company.

The principal and interest requirements constitute, technically, as in most Washington revenue bonds, a lien upon the gross earnings superior to all other expenses. Payments were maintained on the principal, as well as on the interest, until 1930, making eight installments of $833,000 each that were paid, or almost half of the original principal amount. Beginning in 1930 the Puget Sound Power and Light Company granted the city 10-year extensions of time on each maturing principal payment. In addition to the $15,000,000 issue, the city has about $430,000 of other street railway 5 per cent and 6 per cent revenue bonds outstanding.

It was reported that on September 1, 1937 the city failed to meet both principal and interest maturities in the amount of $295,325.[27] Thus the only street railway revenue bonds outstanding prove to be a default case—in fact, the largest, if the postponed principal payments are included.

The street railway system is just about earning operating expenses and depreciation. Deficits for the years ended December 31, 1934, 1935, 1936, and 1937, after interest charges and adjustments, varied between $412,000 and $665,000. The accumulated deficit at the end of that period amounted to more than $5,200,000. The Puget Sound Power and Light Company has now offered to accept a payment of $3,500,000 for its holding of $8,336,000 unpaid street railway bonds.

Two comments may be made on this Seattle default. First, the default may not be typical, in that the bonds are

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$71,000 of revenues derived from the operation of the plant. It would seem that this amount, equal to almost two years' interest on the $635,000 of bonded indebtedness and received during the period prior to the adjustment, was, in equity, owed to the bondholders of that period.

[27] *Moody's Manual, Governments and Municipals: 1938,* p. 1903.

mainly held by the group that sold the enterprise to the city; had the bonds represented funds supplied by the general public, the city might have found a way to repay them, even though it may not strive to repay those who sold a project to the city at what has been alleged to have been too high a price.[28] Second, the default hardly reflects upon revenue bonds as such, unless it be argued that the city would not have become involved in the street railway business had the revenue bond device not existed. An enterprise that can barely cover operating expenses and depreciation would not be transformed into a success merely by using general obligation bonds instead of revenue bonds as a financing medium.

The Seattle experience may be contrasted with that of Detroit, Michigan, where some $35,000,000 of street railway bonds, which are protected by both a pledge of earnings and by a pledge of the tax power, were better treated during the early 1930's than the city's general obligation bonds.[29] The street railway bonds also fared better in the subsequent refunding operations. Whereas interest payments on the general obligation bonds were made partly payable, at the election of the city, in refunding bonds, the interest payments on the street railway bonds were not altered in any way.

Corpus Christi, Texas. The third instance of default, in which the amount of loss that investors will ultimately suffer is still uncertain, pertains to the Corpus Christi triple issue of 6 per cent serial water bonds of 1927, 1928, and 1929, totaling $2,725,000. The additions to the city's water and sewer systems, made possible by these loans, included a reservoir and other structures that may ultimately be classified as "improvements" by the courts, just as they were declared to be, with such disastrous results, in the city of Cross Plains and city of Hamlin cases.[30]

The city of Corpus Christi in 1927 issued $2,000,000 of 6 per cent water revenue bonds, in order to construct a dam and reservoir at some distance from the community, and thereby provide a satisfactory supply of water for the city. Shortly

[28] Paul H. Douglas, "The Seattle Municipal Street Railway System," *Jour. of Political Economy*, XXIX (June 1921), 455, 476.

[29] *Moody's Manual, Governments and Municipals: 1935*, p. 709: "The city paid no principal or interest of its debt (with the exception of interest on Street Railway bonds) from Feb. 1, to June 30, 1933."

[30] See pp. 116–117.

thereafter, when it appeared that the funds raised would not be sufficient to complete the project, additional issues totaling $725,000 were sold. These were to be subordinate to the first issue of $2,000,000.[31]

All of the issues were secured by mortgages on the entire waterworks system and were made payable from the net revenues of the system. In addition, the city covenanted to maintain the water rates at a level at least sufficient to pay the necessary operating charges, as well as the principal and interest payments on the bonds. The latter payments were maintained until 1931, when a section of the dam gave way. In order to get funds to repair the dam it was necessary to apply to the RFC, which was willing to lend $500,000 but only on condition that the original bondholders would subordinate their claims to those of the RFC. This was arranged in 1932, and at the same time the original bondholders agreed to an extension of 12 years on each serial maturity and to accept cash interest at the rate of 4 per cent instead of 6 per cent through 1945, the rate to go back to 6 per cent at the end of that time. In the meantime the other 2 per cent was to be paid in noninterest-bearing scrip.

During the time of the negotiations with the RFC, a suit had been brought by a taxpayer, W. F. Harris, against the mayor, city council, and bondholders, seeking to have the $2,725,000 water revenue bonds canceled on the ground that they had been illegally issued.[32] The argument, in part, was based on the contention that an election should have been held. The city sided with the bondholders in the beginning, but the election of a city administration antagonistic to the bondholders' interests resulted in the city joining with Mr. Harris in an attempt to have the bonds declared invalid. The interests that are attempting to have the bonds declared void have lost at least four court tests. At one stage the city administration reduced the water rates, but after the Texas Supreme Court decided against the city in an early suit, the former rates were restored. It is hardly necessary to detail all of the legal proceedings; the issue is still before the courts and, whichever side wins in the next test, the case will probably be appealed.

[31] Indenture of Nov. 1, 1929, p. 31.

[32] *Daily Bond Buyer,* CXXV (Dec. 11, 1936), 1613. See City of Corpus Christi *v.* Flato, 83 S. W. (2d) 433 (Tex. Civ. App. 1935) for the argument.

An attempt to reorganize the water system's finances in 1936, by providing for a new issue of 4½ per cent first mortgage water revenue bonds that would have been used to retire the RFC loan, and that would also have given the city funds for improvements, failed when the electorate refused to approve the proposed arrangement at an election held December 19, 1936. Had the election carried, holders of the original issues would have been offered 4 per cent and 4¼ per cent second mortgage bonds in exchange for their holdings.

The striking thing about this default has been the lack of economic pressure behind it. There is no declining population here, but a rapidly growing one. The Federal Census showed a population of 10,522 in 1920 and 27,789 in 1930, while estimates for 1936 and 1937 claim 43,500 and 55,000 respectively.[33] The city is rapidly developing into an important seaport with tonnage in 1937 running at nearly twice the rate of 1936. Not only are the people and their demand for water service present, but the gross and net earnings of the system have been adequate. Even after the dam was affected, there were *net* revenues from the operation of the system which were put aside as provided in the original indenture. Actually they were placed in escrow while the outcome of the litigation was awaited. When the decision of the Texas court, favoring the bondholders, was handed down, the impounded funds were turned over to the Bondholders' Protective Committee.

The city from that time on was in good standing on all payments as required under the supplemental indenture adopted at the time of the RFC loan in 1933, until it again defaulted, February 1, 1937, in a renewed attempt to have the bonds declared invalid. In the first 10 months of 1936, the water department's net balance available for principal and interest requirements amounted to $225,049. The amount which the city had covenanted to pay into the "Series 1927 Bond Fund," under the supplemental indenture for the full year ended January 31, 1937, was only $76,640. As one source of information states it, the "water department is a gold mine." [34] The city

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[33] Fenner and Beane, offering circular for $750,000 City of Corpus Christi, Texas Gas System 4¼ per cent Revenue Bonds, dated Nov. 1, 1937. See also *Moody's Manual, Governments and Municipals: 1938.*

[34] Letter from Mr. R. S. Salter, C. W. McNear and Co., Chicago, Ill, April 29, 1938. This house neither originated nor underwrote the original issue.

itself would be the last to claim that it is not prospering. The city attorney has written: "The revenues of the water system of the City of Corpus Christi are sufficient to retire these [water revenue] bonds but payments have been withheld for the reason that the City desires the legal questions involved to be determined by the courts before payment is resumed, if at all." [35]

The second point to note in this default is that, with all the litigation, the revenue bondholders still stand to fare about as well as the general obligation bondholders. The tax-supported bonds also defaulted in some instances and all, except a state aid issue, were refunded in 1936, the maturities being postponed, just as in the case of the revenue bonds.

Again, it should be noted that the use of an indenture did not save this loan from defaulting. It is hard to find an actual illustration supporting the thesis that the bondholders fare better when an indenture is used than they do in its absence.

Lastly, it is significant that the city sold a $750,000 issue of 4¼ per cent gas revenue bonds, dated November 1, 1937. They were priced to the public on a 2 per cent to 4¼ per cent yield basis, depending upon the maturity. The purpose of the issue is, primarily, to supply the $650,000 of funds needed for the construction of a water pipe line which the refinancing, that was voted down December 19, 1936, had been expected to supply. Of the approximately $750,000 to be raised by the present offering, only $100,000 is to be used for gas system purposes. The bond issue has been declared to be legal in its combination aspects, as well as otherwise, by prominent attorneys, including the attorney general of the state. The gas business is a profitable one to the city, the net revenue being in excess of 50 per cent of the gross income in every year but one since 1927, and never less than $109,000. In fact, the revenues have amounted, on the average, to nearly twice the debt service requirements of this issue, the system's only funded debt. Because of the presence of after-acquired clauses in the original indentures, the additional construction on the water system, made possible by this issue, will improve the security behind the water revenue bonds, when and if the validity of the latter is upheld. On the other hand, one might feel warranted in

[35] Letter dated Dec 27, 1937.

being surprised that a community could sell a new issue of revenue bonds to investors, after having made so much trouble for previous holders of securities that were issued by the same community.

The other two instances in which there have been defaults with an, as yet, undetermined amount of loss, relate to water loans in two Kentucky communities, each of which has a population of less than 3,000. The two issues in default are the 6 per cent serial bonds of the city of Clay and the 4 per cent serial refunding bonds of the city of Cloverport.

Summary

Considering the eight cases in which some loss has already occurred or appears imminent, it would appear that the revenue bondholders have fared at least as badly, and usually much worse, than have the holders of the debtors' general obligation securities, where such exist. In only two cases out of the eight (Seattle's municipal street railway and the Alabama State Bridge Corporation) is it clear that the bonds could not in any event have been paid out of the revenues of the enterprise, even if the debtors had been given an extension of time in which to make the payments. In three cases (Cross Plains, Hamlin, Corpus Christi) engineering defects combined with faulty legal provisions to bring about the defaults. Herrin seems to be mainly an illustration of a community with a disinclination to pay an obligation, and with not too good supporting reasons. The true cause, or causes, of the other two defaults are unknown.

Of course it should be remembered that this is a comparison of the worst revenue bond experiences known with the general obligation bond experience of the same political units. As will be shown, it is also true that revenue bonds of a community may fare *better* than the same city's general obligation bonds.

A Threatened Default

The city of Anacortes, Washington, is proposing to refund 5½ per cent water revenue bonds in the amount of $522,000 with 3 per cent bonds,[36] despite the fact that the outstanding

[36] *Bond Buyer*, XCVI (June 4, 1938), 7.

bonds are not callable. The bonds were originally offered in 1924 and 1930. The city has announced that annual requirements over the next 12 years, for principal and interest payments, would be $60,500 as against an average available amount over the past eight years of only $38,500. Furthermore, nearly half of the system's distribution system is said to consist of wooden mains that are from 35 to 40 years old, and it is claimed that these must be replaced in the very near future. If the facts are as the city alleges, it would appear that the city was hardly entitled to the extension of credit which it originally received from the bondholders.

Two Revenue Warrant Defaults

Default by the city of Wagoner, Oklahoma, on its revenue warrants was referred to in Chapter II.[37] That case is mainly notable for the apparent economic soundness of the project, the alleged mismanagement on the part of certain municipal representatives, the success of the receivership, and the ultimate determination that the city owed Fairbanks, Morse and Company for benefit received, despite the fact that it was found that the warrants had been issued without statutory authority.

The second instance of a default on revenue warrants is that of Seymour, Texas. Unlike most Texas revenue obligation defaults, this one did not bring a challenge as to the validity of the obligation itself, but did concern the remedy which the warrant holders sought to exercise. As usual, the lower court supported the interests of the security owners, and for the third time out of the four Texas cases so far discussed, the upper court reversed the lower.[38]

In this instance, Fairbanks, Morse and Company had erected an electric light and power plant for the city and had accepted, upon completion of the plant in 1929, warrants aggregating $125,749.98. In 1930 these warrants were renewed and a schedule of monthly payments arranged. The warrants were issued under the same Texas statutes that supported the other issues so far discussed—Article 1111 and subsequent articles of

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[37] See p. 32.

[38] City of Seymour *v.* Municipal Acceptance Corporation, 96 S. W. (2d) 814 (Tex. Civ. App. 1936).

the Civil Statutes—and were secured both by a pledge of the *net* revenues and by a statutory mortgage. "Prior to the extension agreement, the city had paid on the obligations the sum of $2,935.85, and thereafter paid $14,100 of which $1,000 was paid after the institution of suit, leaving overdue June 1, 1934, after deducting these payments, an amount in excess of $20,000."[39] Because of the default, the Municipal Acceptance Corporation, which had acquired the warrants from the Fairbanks, Morse company, brought suit on the warrants, and also sought to foreclose the contractual and statutory lien. The appellate court found that there had been no "default," the court refusing to concede that a default existed, if the city paid over such net revenues as there were, despite the fact that such net revenues were insufficient to pay the installments as they came due. The court further declared that the city being without "fault in its management, its failure to pay the amounts as stipulated, evidently was due to economic conditions, over which it had no control and for which it should not be penalized by being subjected to foreclosure proceedings."[40] When the city held itself out as being ready and willing to continue making payment of all net revenues, as promised in the contract, the court, taking the city at its word, ordered it to place all such net revenues in escrow for the plaintiff's benefit. At the same time, the court cited a section of the Texas law which requires that the debtor city charge, and collect, sufficient rates to pay for all operating and other expenses, including interest and sinking fund payments,[41] and practically invited the warrant holder to ask for a writ of mandamus to compel a raising of the rates.[42]

PWA Defaults

A few instances of defaults on loans arranged through the PWA have received publicity in the financial periodicals or manuals. These include Bridgeport, Texas,[43] Little Rock, Ar-

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39 *Ibid.*

40 *Ibid.*, 817.

41 Civil Statutes, Art. 1113.

42 "However, nothing said in or implied from our orders shall prejudice any future action plaintiff may be warranted in taking for the protection of its interest"

43 *Daily Bond Buyer,* CXXVI (June 3, 1937), 1583.

kansas,[44] and Point Pleasant, West Virginia.[45] The mayor of the first-named city did not seem to be disturbed at the idea that the city's revenue bonds might never be paid, any distinction on his part between the loan and grant portions of the PWA allotment being practically nonexistent.[46] In the case of Little Rock, its 4 per cent sewer revenue bonds, in the amount of $902,000, were in default in the summer of 1937. Twelve thousand dollars of matured principal was unpaid as of December 1, 1937, but a survey shortly after that date showed that the difficulty was due to a delay of about four months in the completion date of the project and that, once under way, the project would be self-supporting. It was reported in April, 1938, that the default had been "cured" as the result of payments made from current revenues.[47] The Point Pleasant, West Virginia, $90,000 issue of sewer revenue bonds was reported to be in default September 30, 1937, when the Federal government brought an action charging "willful default."[48] This was said to be the first collection suit in connection with this type of PWA loan. Various officers of the sanitary board, created to operate the project, resigned, or their terms expired, so that there was no existing sanitary board. In violation of the state law, it is said, and of the local ordinances that were passed at the inception of the project, the city officials did not and would not appoint successors.[49] The Federal government has now filed liens against the town's dwellings in order to assure itself of ultimate repayment of the loan.[50]

Summaries by States

A few summaries of experience with revenue bonds by states have been made available from time to time.

Iowa. According to a report published May 3, 1938, in the *Financial Reporter*,[51] Iowa's record has been perfect, the while millions of dollars' worth of revenue bonds have been issued

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[44] *Bond Buyer,* XCVI (March 12, 1938), 13 and XCVI (April 16, 1938), 11.
[45] *Moody's Manual, Governments and Municipals: 1938,* p. 1937.
[46] See excerpt from the letter that he wrote to the *Bond Buyer,* p. 214.
[47] *Bond Buyer,* XCVI (April 16, 1938), 11.
[48] *Moody's Manual, Governments and Municipals: 1938,* p. 1937.
[49] *Ibid.*
[50] *New York Herald Tribune,* July 10, 1938, p. 5.
[51] Vol. IV, p 22

over a period of seven years, or ever since the state revenue bond act was passed in 1931.

Kentucky. In 1936 a report published in the *Bond Buyer* in respect to Kentucky experience stated that "Revenue obligations such as water and sewer have had a fine record, and at present, there are only two defaults recorded, and these because the issues were originally of a promotional nature."[52] Of 36 Kentucky cities and towns having a present estimated population of 2,000 or more and owning their own water systems, 19 were recently found to have made use of revenue bonds, either in acquiring or improving the enterprises. Although all except two of the plants were acquired before 1933, they came through the depression with a clear record—not one defaulted at any time as to either interest or principal payments. All but one earned both interest and principal requirements in the fiscal year preceding the date of the report,[53] and in the 19 cities taken as a whole the debt service requirements were earned about one and three-fourths times.

In a different field, it was found that, out of 125 school obligation issues payable from the revenues derived through leasing the school buildings to the boards of education, only one default was known to have occurred, and that one had been corrected at the time of the report.[54]

Michigan. The Michigan Municipal Advisory Council's complete tabulation of Michigan political subdivisions' funded debt, one of the few available for a whole state, showed 32 revenue bond loans for 29 political subdivisions,[55] as of January 1, 1937. Most of the loans were obtained for the purpose of improving water or sewer systems, or a combination of the two. Two of the loans were negotiated by a township and one by a county. All others were municipal loans. Only two of the loans came into existence before 1934. Not one of these reve-

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[52] XCII (March 21, 1936), 50. The two are the city of Clay serial 6's and the city of Cloverport Refunding Serial 4's, both water issues, according to advice from the Bankers Bond Co., Louisville, Ky., the authors of the original item.

[53] *Kentucky Water Revenue Bonds,* J. J. B. Hilliard and Son, Louisville, Ky., 1938.

[54] *Bond Buyer,* XCII (March 21, 1936), 50.

[55] Municipal Advisory Council of Michigan, *Statement of Indebtedness of All Governmental Units in the State of Michigan as of Jan. 1, 1937,* Detroit, Mich. (No pub. date.)

nue bond issues was in default as to either principal or interest at the time of the report.

Revenue-General Obligation Bonds Better Treated than General Obligation Securities

The possibility that revenue bonds would fare better in time of default and reorganization than would general obligation bonds is substantiated by the experiences of holders of bonds issued by Mobile, Alabama, and by Asheville, North Carolina. While the securities held were not ordinary revenue bonds but were actually combined revenue and general obligation bonds, pledges of revenues that had been made by the municipalities were upheld by the courts and authorized to be continued unchanged by both cities, while a major operation was performed upon the general obligation bonds. In the case of Mobile, waterworks funds, at one time impounded by a Federal court, were released for payment on utility bonds only.[56] That the city was well able to service those bonds appears from its annual report for the year ended September 30, 1937, in which the amount available for interest was $332,913.61 as against bond interest of $85,850, or nearly four times the requirements.[57] Similarly, in Asheville, North Carolina, attempts to divert revenues that were pledged to the holders of utility bonds, in the direction of general city requirements and payment of mere general obligation bonds, were thwarted, and the continued application of the revenues to the covenanted purposes strictly ordered in the Federal case of George *v.* Asheville.[58] In the end, perhaps as the result of the court's intimation that tax proceeds could be diverted from the revenue-general obligation bonds, leaving them with only the revenues pledged, as long as that was not less than the general obligation bonds received, the water bonds were also refunded, and fared but little better than the general obligation bonds.

In Lakeland, Florida, $712,000 of general obligation bonds were reported to be in default, as of August 31, 1936, and the interest was then overdue and unpaid in the amount of $545,-

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[56] *Moody's Manual, Governments and Municipals: 1938,* p. 124.
[57] Annual Report, Statement No. 11.
[58] 80 F. (2d) 50 (C.C.A. 4th, 1935).

766. The special assessment situation was still worse. Nevertheless, three issues of 5½ per cent light and water improvement bonds, issued in 1925, 1926, and 1927, for which issues earnings of the light and water plant were pledged, were not in default, but sold at a premium and drew a higher rating from at least one of the rating services than did the general obligation bonds. The earnings covered the interest charges seven times over in 1935 and nine times in 1936, while interest and principal requirements combined were covered more than five times in both of these years. The case of the better treatment accorded the Detroit street railway bonds has already been cited.

Insofar as these general obligation bonds, which were additionally secured by pledges of earnings, were better treated than the straight obligation bonds, the difference is attributable to the added pledge of earnings. The fact lends strength to the belief that revenue bonds themselves might fare better than general obligation bonds in time of trouble.

Revenue Bonds Better Treated than General Obligation Securities

This belief, also, can be supported from actual experience. Perhaps the most outstanding case is that of Royal Oak, Michigan, where a $500,000 issue of water revenue bonds marketed in 1927 was still "current," as of April 1, 1938,[59] whereas all the general obligation and special assessment bonds of the city were refunded in 1936. The refunding of the bonds, other than revenue bonds, was in two parts, consisting of new bonds and certificates of indebtedness. The bonds are to pay a gradually increasing rate of interest starting at 1 per cent and the certificates of indebtedness are not to pay any interest at all.

Eastland, Texas, is another instance similar to that of Royal Oak, Michigan. It was reported that "no payments of principal or interest have been made on city's bonds (*except water revenue bonds* which were reported to be current as to principal and interest, at June 30, 1935) since June, 1931." [60]

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[59] See advertisement by the city in the *Bond Buyer,* XCVI (April 2, 1938), 11.

[60] *Moody's Manual, Governments and Municipals: 1938,* p. 1764. Italics added.

The city of Brownsville, Texas, maintained the payments on its revenue bonds, issued for a combination project, and the PWA which had bought the bonds sold them to the RFC, which organization, in turn, resold them in the open market at a premium, although the city's general obligation bonds were in default, the bids for the latter bonds ranging between 30 and 36 and actually selling around 30.[61]

Stamford, Texas, refunded almost all of its general obligation debt in 1937, at a reduction of 1 per cent in the rate of interest, but no reduction in the amount of principal, while leaving its 1934 waterworks improvement revenue bonds untouched.[62]

A different comparison can be gotten in the case of O'Fallon, Illinois, where $32,900 *special assessment* debt was reported to be in default while the $105,000 water revenue bonds were not so reported.[63]

Port Townsend, Washington, general obligation bonds in the amount of $49,000 defaulted in 1931 and were refunded into a 4½ per cent issue, while 5½ per cent and 6 per cent water revenue bonds, first issued in 1927 and still outstanding in the amount of $506,000, were not disturbed.[64]

Although Chicago never defaulted on either its general obligation bonds or its water revenue certificates, the latter obligations did not fall to any such market levels as did the general obligation bonds. The 4 per cent general obligation bonds of 1950 were quoted at 70 bid, 73 asked,[65] as against a bid price of about 87½ for the 5 per cent water revenue certificates of similar maturity.[66] This is equivalent to about a 6.80 per cent basis for the general obligation bonds as against 6.25 per cent for the revenue bonds. The revenue obligations still sell on a better basis—about a 2.9 per cent yield basis as against a 3 per cent yield basis for comparable general obligation bonds. In this instance, revenue bonds are actually the cheaper form of finance and do not cost the ¼ per cent to ½ per cent more

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61 B. W. Thoron, then director of the Finance Division of the PWA, in personal conversation, Aug. 10, 1937. See also *The National Municipal Bond Summary: Jan. 1933–1934* (The National Quotation Bureau, Inc., New York, 1934), p. 625.

62 *Moody's Manual, Governments and Municipals: 1938,* p. 1807.

63 *Ibid.*, p. 499.

64 Ibid., p. 1901.

65 *Com. and Fin. Chron., Bank and Quotation Record,* VI (May, 1933), 94.

66 *The National Monthly Municipal Bond Summary,* April 20, 1933, p. 67.

per annum that is considered the typical differential between revenue bonds and general obligation securities.

Bankruptcy

A matter closely related to the subject of defaults is that of the possible treatment of revenue bonds under the Federal bankruptcy law. The first attempt at a Federal bankruptcy section that would be applicable to municipal obligations having been declared unconstitutional,[67] Congress passed a new statute in 1937.[68] This act was declared constitutional by the United States Supreme Court in the case of United States *v.* Bekins,[69] April 25, 1938. However, the law is limited in the types of obligations to which it applies, since the compositions permitted apply only to indebtedness payable (a) out of taxes and assessments, (b) out of property acquired by foreclosure of taxes or assessments, (c) *"out of income derived by such taxing agencies or instrumentalities from the sale of water or power or both,"* or (d) from any combination of the above.[70]

From the italicized phrase it would appear that debt represented by sewer, swimming pool, and all other nonwater or nonpower revenue bonds, and perhaps even electric light (as distinguished from power) revenue bonds, could not be "adjusted" by bankruptcy proceedings under this act, in the absence of the bondholders' consent.

Furthermore, the act is applicable only to certain types of taxing agencies and instrumentalities. These include various types of public or local improvement districts, public school districts, and the common political units, "city, town, village, borough, township, or other municipality."[71] It seems possible that, in those cases in which the municipality's utility business is carefully segregated from the community's other affairs, the indebtedness might be held to be that of a body not included in any of those enumerated above. In that case even some of the water and power revenue bonds might escape from the operation of the law.

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67 Ashton *v.* Cameron County Water Improvement District No. 1, 298 U.S. 513 (1936).

68 50 Stat. 653 (Aug. 16, 1937).

69 304 U.S. 27 and 589.

70 50 Stat. 653, 654 Italics added.

71 *Ibid.*

From the standpoint of investors, then, revenue bonds appear to be in a position superior to that held by such general obligation bonds as the court will admit to composition proceedings. This superiority of status may be of temporary duration, however, since the bankruptcy amendment as enacted is an authorization that is effective only up to June 30, 1940. If not re-enacted at that time, there would be no difference in the status of the two types of obligations under the Federal Bankruptcy Act.

CHAPTER VII

Leading Types and Users

THE leading types of public utilities or services that are financed by the use of revenue bonds are, in the order of their importance, the bridge, electric light, water, and sewer services. Of secondary importance, from the standpoint of the use that they make of revenue bonds, are the gas, street railway, and educational activities.

Comparisons of the experiences in different cities will not be easy for two reasons: first, because the forms for municipal financial statements are not standardized and consequently the accounting terms as used in one city do not necessarily indicate the same state of facts that they do when used by another municipality, and second, because the adequacy of the sums included in accounts, even if the content of the terms used were standardized, cannot be determined short of an engineering inspection of the property itself. But two things, at least, can be accomplished: the leading cities that use revenue bonds,[1] and the utilities, in connection with which the cities employ the bonds, can be identified; and comment can be passed upon the variations from the standard practice that are found in the revenue bond procedure of particular political units. Because a huge majority of bridge revenue bonds are issued by statutory authorities, the discussion of this, the most important type,[2] will be postponed to the chapter dealing with statutory authorities.

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[1] The largest municipal users of revenue bonds, judged by the amount of outstanding revenue bonds, are, in order: Los Angeles, Seattle, Chicago, Tacoma, Buffalo, Indianapolis, Utica, Little Rock, St Louis, and San Antonio. Some of these cities use semi-independent political units as the immediate borrowing agencies.

[2] See Table 2, p. 78.

prepares its own income and balance sheet statements. The earned surplus account stood at $10,432,200.70, as of December 31, 1937. In addition, the sum of $8,536,249.92, that was derived from local improvement assessments, has been spent to construct mains and hydrants for the water department. The total net assets, deducting current liabilities only, are equal to about three and one-half times the outstanding bonds.

If none of the contributed funds were allowed to enter directly into the income account (as of course they should not be), the income available for interest and amortization of discount, after depreciation, averaged about 1.3 times the requirements in the years 1934–36, and was not less than 1.2 times the requirements in the poorest of those years, thanks to a variable rate of depreciation charge that fluctuated between about 1 per cent and 2 per cent of the value of the fixed assets.

The holders of Seattle water revenue bonds appear to be quite secure, especially in view of the contributions that are made to the system out of the proceeds of assessments. These contributions add both asset support and earning power to the bonds. At the current rate of retirement there will be no bonds outstanding in about 17 years, unless redemption is rendered impossible by an absence of provisions for calling the bonds prior to maturity, or unless new issues are floated. The present debt consists of $4,669,000 revenue bonds paying 4¼ per cent and 4½ per cent interest, due serially up to 1962, and $2,426,000 of debt that bears coupons of 2 per cent or less. The last-named portion of the debt was all issued since the year 1934 and matures not later than 1943.

In the cases of both the Seattle and Tacoma water revenue bonds, as well as the electric revenue bonds of the cities, the rights of the bondholders vary in accordance with the date of the establishment of the fund from which the particular issue which they own is serviced. Other illustrations of this practice of subordinating one revenue bond issue to another are to be found in the Jacksonville, Florida, electric revenue financing and in the financing of waterworks by Pittsburg, Kansas, and Bedford, Indiana.[7] Further discussion of this matter is reserved for treatment in the section dealing with the Seattle electric revenue bonds.

[7] See *Moody's Manual, Governments and Municipals: 1938,* under the respective cities.

Tacoma. The Tacoma situation is somewhat less favorable. Here the net assets available to pay the $5,734,495 revenue bonds and warrants outstanding, as of December 31, 1937, would be about 1¼ to 1, and the income available at the end of the year for interest, after allowing for taxes, depreciation, and a sizable amount of "other income," amounted to $192,664. Federal grants of $513,941 over a three-year period, 1934–1936, made the situation appear better than it really is, since this nonoperating source of income cannot be counted on for the future. Of the $7,709,000 fixed assets recently reported, $1,901,000 was credited to Local Improvement District construction, the Municipal Water Division again, as in Seattle, being the beneficiary of tax contributions.[8] The division absorbs the cost of maintaining the fire hydrants for the city; if a charge were to be made for this service the division would be truly self-sustaining. Of course, from the standpoint of the bondholders, the important considerations are: Can, and will, the enterprise be made self-supporting? There is little doubt but what the answer to both of these questions is yes. The outstanding bonds vary in coupon rate between 3.10 per cent and 6 per cent.

St. Louis. The original issues of waterworks revenue bonds, totaling some $10,000,000, had been paid down, as of July 10, 1938, to $6,253,000. The waterworks themselves are valued at $55,000,000 and are self-supporting.[9] The receipts exceeded expenditures by nearly $600,000 in the fiscal year of 1935, and by nearly $400,000 in 1937, but fell short of equaling expenditures by almost $100,000 in 1936. By the end of the 1937 fiscal year there had been accumulated over the years a surplus of $2,513,992 excess receipts over expenditures. The water revenue bonds bear 4¼ and 4½ per cent interest and mature serially through 1949.

San Antonio. The San Antonio water revenue bonds consist of a single large issue of $6,062,000 5½ per cent first mortgage bonds. This is the unpaid portion of a serial issue running to 1965, and first floated in 1925, at which time $7,000,000 of bonds were sold. The bonds were issued in order to make possible the acquisition and subsequent improvement

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[8] See p. 138.

[9] *Moody's Manual, Governments and Municipals: 1939,* p. 816.

of the water plant of the San Antonio Water Supply Company, a private concern. The city covenanted, among other things, to maintain such rates as were necessary to meet all expenses and charges.[10] Income available to pay interest, before depreciation, was more than twice the required amount in 1934, but smaller operating revenues in 1935 and 1936 resulted in net earnings of nearer 1⅔ and 1¾ times requirements, respectively. The decreased operating revenues, together with increased charges for depreciation, resulted in net profits of only $8,858 and $48,189 in the fiscal years 1935 and 1936.

Chicago. Chicago's water system is under the control of the Commissioner of Public Works and is operated by the bureaus of water and of engineering. The city of Chicago had $24,792,000 in water revenue certificates outstanding, as of August 19, 1938. The rates of interest that are paid vary from 3 per cent to 5 per cent. Nearly $15,000,000 of the total bonded debt pays the higher rate named. Total assets are in excess of $157,000,000, and current liabilities are relatively negligible. There is thus very substantial asset value behind the bonds. On the operating side, the balance available for interest, in the last three years, before allowing for maturing certificates, has varied between bare coverage in 1935 and a coverage of nearly four times in 1936. The operating expenses comprise an unusually high percentage of the system's total revenue—almost 67 per cent against about 25 per cent for the Tacoma system and 33 per cent for that of Seattle. After all allowances, including bad debts and repayments of principal, the balance remaining in the three-year period has varied from a deficit of $1,705,268 in 1935 to a surplus of $6,211 in 1936.

Milwaukee. The city of Milwaukee authorized a single issue of $3,675,000 Water Works Mortgage bonds on June 25, 1934. The bonds were serial obligations, paying 4 per cent and due serially to 1955. About two-thirds of the issue was sold publicly, the rest to various city funds. Three million forty-four thousand dollars worth of the bonds were still outstanding as of December 31, 1937. The purpose of the issue was the extension and improvement of the existing system. This issue is interesting for the specific apportionments of the gross

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[10] *Ibid.*, p. 1590.

revenues that are made in the bond ordinance.[11] Sixteen per cent of the gross revenues are pledged to a Water Works Bond and Interest Special Redemption Fund. This payment is to come from the first gross income available and it is covenanted that the *amount* will, in any event, be sufficient to meet the principal and interest payments that come due, notwithstanding the stated *proportion* that is allocated. Fifty-five per cent of the revenues are pledged to an operation and maintenance fund and 12 per cent to a depreciation reserve fund, leaving 17 per cent of the gross earnings not pledged. The city further promises not to sell, lease, or in any manner dispose of its water system or any part thereof, until all outstanding bonds have been paid or provided for. In addition, a statutory mortgage, which, incidentally, contains an after-acquired clause, is created for the further security of the bonds.

The pledge of definite percentages to the various funds does not appear to be as significant as one might think. One section provides that no payments need be made into the Water Works Bond and Interest Special Redemption Fund in any month if the sums in the fund equal all outgoing requirements for a period of a year from the succeeding July 1st.[12] This helps to explain the large transfers to the General Fund in lieu of taxes, such payments running currently around $800,000 per annum, equal to about 28 per cent of the current revenues instead of the apparent maximum available proportion of 17 per cent. Insofar as this transfer practice diverts funds that might otherwise go to build up a strong bond reserve fund which would be available in lean years, this practice seems undesirable. If the city guaranteed the bonds, promising to transfer funds from the General Fund to the Bond Fund in case of need, this policy might be condoned, but revenue bonds are accompanied by no such promise. If all the surplus earnings are transferred each year, the revenue bonds will be in a precarious position as soon as a single year of bad operating results is encountered. Possibly this policy of transferring funds would be followed only by a city which is confident of annual surpluses, but, at the least, the Bond Fund would seem to be entitled to a credit against, or lien upon, the city for the

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[11] Ordinance of June 25, 1934, sec. 1.
[12] Sec. 1, last paragraph.

amounts transferred, should the fund otherwise be unable to service its obligations. Revenue bonds have been compared to private corporation bonds, but few private corporations with bonds outstanding distribute 100 per cent of the net earnings remaining after interest payments. Even when they do, it can be argued plausibly enough that they should not do so, as long as bonds are outstanding; and this is true even though the private company's bonds constitute less than a 100 per cent loan on the improvements. To an even greater extent should city departments and divisions, as issuers of revenue bonds that frequently represent 100 per cent of the cost of the project, arrange to create reserve funds for the protection of the bondholders.

There is not much doubt about the city's ability to meet its water revenue debt service requirements. The maximum amount required in any one year is a sum slightly in excess of $300,000. This maximum amount was due in 1938 and is about 25 per cent of the net income after depreciation, but before the not-required transfers in lieu of taxes.

Los Angeles. The city of Los Angeles organized its water and electrical business under the name of the Department of Water and Power in 1925. Since then the business has been conducted under the direction of a Board of Water and Power Commissioners, consisting of five members. The department is divided into two bureaus, one called the Bureau of Power and Light and the other the Bureau of Water Works and Supply. Each of the bureaus is in charge of a general manager who is appointed by the commissioners. The revenues of each bureau are kept separate from those of the other bureau and from those of the city; funds of the water bureau are placed in a Water Revenue Fund. The water revenue bonds of the department consist mainly of a 1938 issue of 2¼ per cent and 2½ per cent bonds in the amount of $2,150,000. All of the outstanding 3¾ per cent bonds, which were the city's only previously existing water revenue bonds, were called for payment as of July 1, 1938. The city itself has many issues of general obligation waterworks bonds outstanding, and, while these are payable, if necessary, out of unlimited ad valorem taxes, they have an equal right with the two issues of water revenue bonds to the moneys in the Water Revenue Fund. In practice, they are serviced, along with the revenue bonds, out

of the utility revenues. The bureau's balance sheet shows net assets available for the entire $70,704,150 of city and bureau water bonds combined of nearly 2 to 1, while the operating statements reveal income available for all bond interest, after depreciation, of about 1.6 times interest requirements in the years 1935, 1936, and 1937.

Little Rock. Dissatisfied with the hard and salty character of the water taken from the Arkansas River and furnished to the city by the Arkansas Water Company, Little Rock in 1935 investigated the possibility of substituting mountain water for the river water, and found that the proposed piping of the water from a distance was feasible. It also received assurance that the PWA would assist in the financing, provided that the city would first acquire the existing system, which it did at a cost of $3,850,000.[13] The PWA made a grant of $1,386,000 and a loan of $1,694,000. The remainder of the required funds was obtained by a $6,590,000 loan secured by 4 per cent water revenue bonds due serially to 1976. Thereupon the city constructed a dam and reservoir 35 miles west of Little Rock, and the reservoir was filled in February, 1938.

The entire water system is managed by a Utility Board composed of three members. It was estimated early in 1937 that approximately $450,000 would be available for the annual depreciation and debt service, whereas the annual debt service charges would normally be about $335,000. It took somewhat longer than expected to establish the system, with some consequent delay in making promised payments to various funds. However, it was announced in April, 1938, in the *Bond Buyer*, that the Bond and Interest Fund of the Water Department "had been brought to par" and that all provisions of the trust indenture were being met.[14]

An appraisal of water revenue bonds. From the standpoint of the investor, water revenue bonds tend to be attractive, if at all, for the same reason that any purchase may be attractive —the most benefits or desirable qualities for the least expenditure of money. It has been shown that the price of revenue bonds is somewhat lower, and the yield, therefore, somewhat higher on the average than in the case of general obligation

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[13] Robert E. McDonnell, "Little Rock Enjoys Pure, Soft Water Supply," *Water Works Engineering,* XCI (March 30, 1938), 370

[14] XCVI (April 2, 1938), 53.

bonds. But this fact would not mean that the revenue bonds were cheap (from the standpoint of the investor), unless the security and other qualities of the bonds were nearly comparable to those of general obligation bonds. The differences in the nature of the security and in the attendant remedies accompanying the two kinds of bonds are the primary factors differentiating the one type from the other, since there is hardly any difference in their tax exemption status and no necessary difference in the maturity dates or callable provisions. Perhaps there is also no necessary difference as to the marketability of the bonds, although, at present, the limitation on savings bank investment in revenue bonds, their relative newness, and the small size of the typical revenue bond issue hamper their market somewhat, and by that much justify the yield differential in some minds and make them bargains in the minds of others. As to the available remedies, it was pointed out in Chapter III that in the opinion of some competent attorneys the remedies supporting revenue bonds were considered even superior to those attending general obligation bonds.

In evaluating the security that supports a new issue of revenue bonds, the likelihood that the enterprise can be profitably operated is, naturally, a most important factor. To the extent that success appears to be assured, revenue bonds may approach or even exceed the certainty of payment to be expected from tax-supported obligations as well as that to be expected from the securities of the private utilities. Confidence in municipal revenue bonds generally, as against private utility bonds, has been justified on the grounds of a lesser possibility of competition, less restriction of rates to be charged, immunity from all Federal income taxation, and savings in such expenses as advertising, selling, rent, and salaries.[15] It may also be pointed out that municipal revenue bonds may be superior to the municipality's general obligation bonds insofar as water revenues are more collectible than taxes, and insofar as there is greater certainty that funds for debt service needs will continue to be available. There are logical reasons for believing that water rates are more collectible than taxes.

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[15] H. R. Hamilton, *Water Revenue Bonds* (Lewis, Pickett and Co., Chicago, Ill., 1937), p. 6 ff.

For one thing, they are collected monthly or quarterly and almost never in as large amounts as the general tax bill. Again, if payment is not made the service can be discontinued easily and quickly, thereby causing an inconvenience that most users do not relish. Furthermore, it is reasonably certain that there will continue to be net revenues. There is no substitute for water and no other method of making it available. The actual consumption has declined but little in times of depression. Los Angeles, for instance, showed a decline from 239,000,000 gallons daily in 1930 to 204,000,000 gallons in 1933 and 188,000,000 (the lowest) in 1935. The consumption then jumped back to 224,000,000 in 1936. The decline at worst was a little over 20 per cent, and only about 6 per cent as of 1936.

On the whole, the absence of any substitute, the necessity of the article, the monopolistic nature of the marketing, and the relatively small payments per family per year make water revenue bonds, when properly issued, about the best municipal bond obtainable, and certainly the best of the municipal revenue bonds. Most of the water revenue bond defaults that have occurred in the past can be ascribed to a combination of faulty engineering and inadequate legal provisions in setting up the bonds, or to a too large capital outlay per inhabitant.[16] Experience will soon lead those who are responsible to make the necessary technical reforms. Future difficulties will probably come about primarily because of overoptimistic construction.

From the standpoint of the municipality, the use of water revenue bonds is advantageous in that it frees the city's general bonding power for other uses, especially for use in connection with the financing of nonself-sustaining activities. A second advantage to the city that is sometimes claimed is that, should the utility unexpectedly fail to be self-sustaining, no burden would fall upon the general taxpayer.[17]

Effect upon municipal ownership. The last question that might well be answered here is: What effect are water revenue

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[16] On account of the central station expense it is said that a system cannot hope to pay its way unless there are at least 150 connections, whereas systems have recently been organized with as few as 50.

[17] *Revenue Bond Financing by Political Subdivisions* (U. S. Govt. Ptg. Office, Wash., D. C., 1936), p. 12.

bonds likely to have upon municipal ownership? The answer is: not very much. Most of the cities already own their own systems. The National Resources Board called attention to the limited extent of private ownership of waterworks in its 1934 Report as follows: "An analysis of 67,000,000 water consumers shows that about 20% are served by privately owned companies. . . . Private ownership is more generally limited to small cities and towns."[18] In 1936, 84 of the 94 American cities with a population of over 100,000 reported that they received income from water supply enterprises which they operated.[19] Thus one may well expect to find that the major use of water revenue bonds will be in connection with the replacing of tax obligations floated originally to finance water systems, or, where such refunding does not take place, possibly in connection with the financing of improvements and extensions to existing systems. Revenue bonds have been used, however, in financing the acquisition of a few private utility systems, notably Little Rock, Arkansas; San Antonio, Texas; and Keokuk, Iowa. Only to the extent that such acquisitions would not have been made had revenue bonds not been used, can the claim be made that the use of revenue bonds promotes public ownership.

Electric Light and Power

Preceding the water projects as a source of revenue bond volume, but trailing far behind as to the number of individual users, is the electric light and power industry. Of the 3,501 reported establishments in this country in 1937,[20] 1,860 were owned by the municipalities.[21] Of these not more than 40 have been financed by the use of revenue bonds. But the importance of revenue bonds to municipal electric light and power business is greater than appears from such figures. Of the 12 plants belonging to cities of over 100,000 population [22] four are

[18] *National Resources Board Report* (U. S. Govt. Ptg. Office, Wash., D. C., Dec. 31, 1934), pp. 331–332.

[19] *Financial Statistics of Cities: 1936* (U. S. Govt. Ptg. Office, Wash., D. C.), Table 11.

[20] *Census of Electric Light and Power Industry: 1937* (Bureau of the Census, U. S. Dept. of Commerce, Wash., D. C., May 3, 1939), Press Release (First Series E. L. P. 1).

[21] *Ibid.*

[22] *Municipal Yearbook: 1938,* p. 248.

those of cities which have used revenue bonds in part or entirely in their electric light and power financing. And at present 66.6 per cent of the total electric light and power indebtedness of these 11 cities is represented by revenue bonds. The total long-term debt, in 1937, for municipal plants was reported to be $249,019,624,[23] while municipal electric revenue bonds in 1937 amounted to $128,640,000. Thus there is not here the possibility of large revenue bond business through substitution for general obligation bonds that existed in the case of municipal water bonds. If there is to be a considerable gain in the amount of electric light and power bonds that are outstanding, it will have to come about as the accompaniment of an increase in municipal ownership.

Tacoma. The first city in the United States to use revenue bonds for purposes of financing its electric light and power activities was Tacoma. Its first issue, 5 per cent bonds that were sold in 1910, matured in 1926. Today it has outstanding five issues totaling $5,307,000 maturing serially up to 1951. All of the issues bear interest at the rate of 4¾ per cent, except the oldest issue, which carries 5½ per cent. This issue was sold in 1924, but all the others were marketed in 1929 and 1930. These issues, like the Seattle and Tacoma water issues, are entitled to share in the gross earnings in the order of the date of the establishment of the funds from which they are serviced. Net assets of the Tacoma Municipal Light Division, after allowing for payment of the current liabilities, were over $26,000,000 as of December 31, 1937, whereas the division's revenue bonds were outstanding at that time in the amount of $5,307,000. This indebtedness represented a reduction of $2,036,000 in the short period of three years. Interest has been earned at the rate of about four times over, during the three years ended December 31, 1937, and, incidentally, at an improving rate of coverage. These five issues are rated A by *Moody's* as against the BAA rating given the general obligation bonds of the city.

Seattle. The city of Seattle began operation of its own municipal lighting plant in the spring of 1905. Through 1914 the city financed "City Light," as the electric light and power

[23] *Census of Electric Light and Power Industry: 1937,* Press Release (Second Series E. L. P. 2).

division of the city is known, by the issuance of general obligation bonds, all of which are now retired. Shortly after 1914 the city changed to the revenue bond method of raising the funds that were needed for its electric light and power activities, and since 1916 revenue bonds have been issued in every year but four. These bonds have borne interest at rates varying from 6 per cent in 1921 to 3½ per cent in 1936. Of some $55,962,000 revenue bonds issued, $19,328,000 have been redeemed, and of those redeemed about $8,000,000 were refunded in 1935 and 1936. The refunding was accompanied by a reduction in the coupon rate of interest from an average of 4.67 per cent to an average of 3.90 per cent.

As of December 31, 1937, City Light had $38,346,000 of revenue bonds outstanding, against which, after allowing for current liabilities, it had over $53,000,000 of assets. This is not as large a margin of safety as exists in the case of the Tacoma municipal light division. City Light in recent years has been reporting an income of approximately $1,800,000 after operating expenses and depreciation, as against annual interest and other charges approaching $1,550,000. This is a slight margin of safety and does not compare at all favorably with the Tacoma ratio of net earnings to interest charges. The slight margin of safety and the effects of certain unorthodox fiscal policies [24] are reflected in City Light's recent financing. Where previously it had been selling 3½ per cent bonds, it sold, in the latter part of 1937, $750,000 4 per cent bonds to Bancamerica-Blair Corporation at 97, or a 4.29 per cent basis,[25] and two months later sold to the same firm $898,000 of 4¼'s at 94, equivalent to about a 4¾ per cent basis.[26]

One of the most serious features of the Seattle situation is the varying status of the successive series of revenue bonds; and this applies equally to the water revenue bonds as well as to the City Light bonds. It also applies, as has been noted, to the water and to the electric bonds of Tacoma. Formerly no distinction was made in the *Moody Manuals* between the different series, but beginning in 1938 the series are listed separately and rated differently by groups.

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[24] For instance, the free and easy transfer of sums from one municipal fund to another.

[25] *Com. and Fin. Chron.*, CXLV (Nov. 20, 1937), 3388.

[26] *Ibid.*, CXLVI (Jan. 8, 1938), 312.

The statute and the ordinances under which the bonds are issued provide that they shall be payable out of the *gross* revenues. Since there is easily a sufficient sum of gross revenues to cover all charges on all of the issues, it might be argued that the relative priority of the different series of bonds is unimportant. But Moody's Investors' Service concluded that the fact that the bonds are payable out of the gross revenues

> . . . would be only an advantage in the event of temporary operating difficulties. Although the bond ordinances declared that debt service shall be a charge upon gross revenues, from the language of the ordinances it would seem that debt service ranks as a charge upon gross equally with the costs of operations and maintenance.[27]

This apparent sharing arrangement weakens the position of the later series, but does not leave them in as bad a position as if they were payable only from the net revenues. At least the legal status seems somewhat better. Practically, however, as *Moody's* intimates, the operating expenses are quite certain to come out of gross before the bond interest and principal payments are taken care of.

In the case of City Light, the relatively small balance annually available for fixed charges tends to make the order of payment an important matter. The rule is that the various series are serviced according to the date of the establishment of the funds from which they are serviced.[28] Thus it would be possible for a block of bonds to be serviced ahead of an earlier marketed block, if the later marketed bonds but carried the series letter of an earlier issue; or, to put it another way, a block of bonds offered now may, at a later date, have more debt ahead of it than it had at the time of issue.

This rule as to order of payment also applies to refunding bonds, so that when the $7,900,000 refunding was carried through in 1935 and 1936, the recipients of the refunding bonds found themselves in a position in which their bonds were to be serviced out of the fund established for payment of the refunding bonds—not out of the fund established to take care of the preceding issues which the refunding bonds replaced. This set them back from seventh position to ninth. The Moody rating on the refunding issues is BA as against BAA

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[27] Special report on Seattle, Wash., June 9, 1937, p. 1.
[28] *Moody's Manual, Governments and Municipals: 1939,* p. 1672.

for the bonds which now hold the position formerly held by the bonds that were refunded.

Again, the fact that the city's corporation counsel has held that the city and state gross income taxes recently imposed upon City Light are a claim upon the revenues junior to debt service on all outstanding or previously authorized bonds is a factor favorable to the security of the earlier bonds,[29] but should be noted by buyers of later issued bonds. Furthermore, the tax payments reduce the amounts which would otherwise be available as additional protection in later years for the revenue bonds. In six years such annual payments have risen from zero to over $303,000.

By adding the charges for depreciation to the reported total income, Moody estimated that the balance, before taxes, to be expected in 1938 would cover principal and interest of the bonds, through Series LX (the Sixth Charge obligations), 1.90 times, increasing to 2.14 and 2.48 times in the succeeding two years. Principal and interest requirements through the LS group would be covered 1.06, 1.08, and 1.09 times during the same series of years.[30] After taxes, there would be a slight deficit varying from $122,333 in 1938 to $38,919 in 1940. Of course, it is not the policy of City Light to operate at a profit and these deficits would not necessarily be serious.

It is not suggested that City Light could not levy such charges or collect such sums as would be necessary to pay the principal and interest on the bonds. The two points to be emphasized are the different relative positions of the various series in view of current income and, secondly, the small margin of present excess revenue over needs, which small leeway might turn out to be temporarily embarrassing and, in the long run, poor economy.

The Moody evaluation is: "Most series considered medium grade and suitable for retention as high yielding income producers."[31]

Los Angeles. A third municipality making extensive use of electric light and power revenue bonds is Los Angeles, California. It is, in fact, the largest user of light and power revenue bonds and, at the same time, the largest municipal user of

[29] See Offering Circular for the $750,000 issue, Series LU-5, Oct. 5, 1937.
[30] Special report on Seattle, Wash., Sept. 1, 1937.
[31] Report cited in Footnote 27.

revenue bonds for any and all purposes. Only the Federal government, with its Federal Intermediate Credit Bank debentures, and the Port of New York Authority, with its bridge and tunnel bonds, exceed the city of Los Angeles in the volume of revenue bonds issued. Incidentally, Los Angeles is the only California city presently using revenue bonds.[32]

As explained in the section dealing with the use of water revenue bonds by the city, the electric light and power business is under the control of a Board of Water and Power Commissioners which board, in turn, appoints a general manager to supervise the operations of its Bureau of Power and Light.[33]

Just as a "Water Revenue Fund" is created, in which all water revenues are deposited, so a "Power Revenue Fund" is created for all power and light revenues. Because the general obligation bonds that were sold in the years between 1911 and 1928 also have a pro rata claim on this Power Revenue Fund for principal and interest requirements, the bureau carried its bonded debt at $109,875,000, as of December 1, 1937. This sum included $29,876,000 of general obligation bonds. The remaining $79,999,000 of bonds were revenue bonds.

The resolution of the Board of Water and Power Commissioners that authorized the $9,000,000 issue of Electric Plant Revenue Bonds, Second Issue of 1937,[34] is illustrative of two types of covenants not previously commented on. The first is a covenant respecting transfers of funds. In this case the covenant relates to transfers out of the Power Revenue Fund, the fund into which all revenues are originally turned. This covenant forbids transfers (a) in excess of the net income, after depreciation and debt charges, of the system for the preceding year, or (b) if the effect of the transfer would be to reduce the earned surplus below 33⅓ per cent of the total indebtedness that is payable out of the Power Revenue Fund.[35]

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[32] *California Municipal Bonds* (Kaiser and Co., San Francisco, Calif., 1937), p 18.

[33] Two enlightening articles on the Los Angeles Bureau of Water Works and Supply and the Bureau of Power and Light are, respectively: H. A. Van Norman, "Financing Public Utilities," *Jour. of the Amer. Water Works Assn.*, XXV (March 1933), 315 ff., and Martin G. Glaeser, "The Los Angeles Bureau of Power and Light," *Jour. of Land and Public Utility Economics*, VI (November 1930), 343 ff., and later issues.

[34] Resolution No. 461 (Appendix 2-b, *Official Statement*, Nov. 30, 1937), adopted Nov. 30, 1937.

[35] Art. V, sec. 19.

The second covenant provides that no additional indebtedness payable out of the Power Revenue Fund shall be incurred

(a) unless the net income, before depreciation, amortization, and interest chargeable to income account (with provisions for adjustments in case of property newly acquired, or being acquired) shall have amounted to

(1) at least twice the maximum interest charges to be due in any succeeding year on all the indebtedness, including the proposed issue, to be immediately outstanding, and

(2) at least one and one-quarter times the maximum sum of interest and principal to be due in any one year in respect to the indebtedness as defined in (1), and

(b) unless the earned surplus accounts equals at least 33 1/3 per cent of the total indebtedness to be outstanding, including the proposed issue.[36]

After allowing for current liabilities, the bureau shows net assets of over $170,000,000, as against the nearly $110,000,000 of funded debt. For the year ended June 30, 1937, net income after depreciation, amounted to $7,773,611, as against interest charges of $2,993,905. This period included five months of operation following the acquisition of the electric properties of the Los Angeles Gas and Electric Corporation. The maximum debt service requirements will be reached in 1944–1945 and will then amount to less than two-thirds of the minimum consolidated net earnings realized in any year of the depression. The department now does nearly 90 per cent of the electric energy business of the city.

It undoubtedly costs Los Angeles somewhat more in the way of interest charges to issue revenue bonds than to issue general obligation bonds. In view of that fact, one might well ask why it is that Los Angeles resorts to the use of revenue bonds. In 1933 Professor Glaeser wrote: "The chief difficulty of the Power Bureau has been that it has been unable to supply itself with the funds required to meet its obligations as a public utility." [37] The bureau must secure its capital by public borrowing and, if this is accompanied by general obligation bonds, an election must be held and the approval of two-thirds of the voters secured. Furthermore, no provision is made that would enable the city to spend the amount required to educate the public in respect to the benefits to be derived from the con-

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[36] *Ibid.*, sec. 20.

[37] "The Los Angeles Bureau of Power and Light: A Critical Summary," *Jour. of Land and Public Utility Economics,* IX (August 1933), 217, 226.

templated issue. This state of affairs explains the resort to what otherwise might be looked upon as uneconomic procedure. No vote whatsoever is required of the citizenry to enable the board to issue revenue bonds having a maturity of less than 20 years, and only a majority vote is needed for longer term revenue bonds.

One aspect of the Los Angeles situation that may be looked upon as unfavorable to the interest of the bondholder is the fact that the provisions respecting limitations on transfers out of the Power Revenue Fund, and upon the creation of additional indebtedness, are, in respect to some of the Los Angeles Department of Water and Power bonds, mere declarations of policy without binding authority.[38] Even when they are binding covenants, as the result of using other sections of the city charter, there is provision for obtaining consent to the alteration of the original covenants. Such important covenants as those respecting the rates to be charged, the prohibition against issuing any bonds having a priority over the immediate issue, sale of the system, transfers from the Power Revenue Fund, limitations on the creation of additional indebtedness, even the remedies named at the time of issue can be changed so as to be binding upon a nonconsenting bondholder if the holders of 60 per cent of the outstanding bonds, exclusive of those owned by the Department of Water and Power and by the city of Los Angeles, approve.[39]

Jacksonville, Florida. This city has owned and operated its own plant since 1893. Some of its current financing has been done with general obligation bonds, more of it with bonds that represent liens on the revenues in addition to being general obligations, and $2,150,000 in three issues, made up of $200,000 4 per cent, $950,000 of 2½ per cent, and $1,000,000 of 2¼ per cent electric revenue bonds,[40] that carry no pledge of tax power.

The striking thing about the Jacksonville situation is the fact that the electric light plant is operated intentionally as a

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[38] See Resolution of the Board adopted Nov. 7, 1935 as supplemented Nov. 20, 1935, sections 7 and 8, authorizing the $22,799,000 refunding loan, and Resolution No 462, Nov. 30, 1937, sec 18, authorizing the $1,200,000 issue of 1937.

[39] See *Official Statement*, Department of Water and Power, City of Los Angeles, Nov. 30, 1937, p. 52 (Appendix 2-b, Art. V, sec. 23).

[40] For further details of the three issues see *Moody's Manual, Governments and Municipals: 1939*.

money-making project. This may not be as favorable to the consumer as the Seattle policy of operating at cost, but it is better for the bondholder. The net earnings in 1937 were more than $2,000,000, and over the 20-year period, ending December 31, 1937, the total net earnings amounted to $25,813,587. Transfers to the city's general fund have been at the rate of about $1,300,000 a year over the past three years. If there were need of more funds with which to pay the principal and interest on the bonds, the amount of the transfers could be reduced.

In this case the credit of the general obligation bonds is strengthened by the enlargement of the city's general funds as a result of the utility contributions. Even general refunding and paving refunding bonds are being aided by direct pledges of electric plant revenues, but these pledges are subordinate to the lien of the $2,150,000 of electric plant certificates.

The Moody rating of the electric plant revenues certificates is A, as against the BAA rating of the general obligations, and this despite the fact the general obligation bonds are frequently supported by a secondary pledge of electric revenues in addition to their pledge of tax proceeds.

Other notable recent additions to the list of users of electric revenue bonds are the cities of Knoxville, Tennessee and Danville, Virginia, and the People of Puerto Rico.

Summary. The first thing that strikes one's attention in surveying the electric revenue bonds of these cities is that none of the issues is accompanied by a mortgage. This is probably the result of the state location of the plants. Had they been located in Ohio, West Virginia, and Michigan instead of in Washington, California, and Florida, the issues might all have been accompanied by mortgages. A second feature that is obvious is the concentration of electric revenue bonds on the West Coast. But this naturally follows from the fact that municipal ownership is more advanced there than it is in other parts of the country.

The mention of municipal ownership brings the discussion again to a consideration of what the effects of the use of revenue bonds may be upon the extent of municipal ownership, this time as related to the electrical industry. In discussing the same question in respect to waterworks, it was said that no great change was likely to take place in the proportion of

municipally owned plants, because the waterworks systems were already, for the most part, municipally owned.

In this case the situation is just the opposite for, while there are more municipal electric plants than private ones, the municipal plants do only about 6 per cent of the business and the large private plants, integrated into great networks, do by far the major part of the business. Thus the opportunity to increase the number of municipal plants, and especially the proportion of business done, is beyond question. Whether the cities will actually increase this proportion of municipally owned plants, however, is uncertain. In the case of water service, the public evidently approves of public ownership, the private companies are small and the legal opposition to the exercise of eminent domain proceedings not very severe. On the other hand, in the electrical field the public is not so certain that it wants municipal ownership; elections seem to go against proposed ventures more often than for them; the private companies are financially and politically strong, often being aligned in large holding companies operating through whole sections of the country and ready to contest at great length, by injunctions or other suits, any attempts of the municipalities to acquire the corporate properties, or to install competitive ones. In addition to the neutral or opposing attitude of the public and the stern opposition of the highly organized private interests, there are legal difficulties to be overcome. The economies of a single plant are limited in comparison to the economies possible in large scale operation. Where municipalities can not legally join in a single enterprise to furnish power and light throughout a wide area, local municipal ownership may not be economical as against private ownership at its best. Of course, these legal difficulties may be removed, but it may take years of concerted effort. In general, there seems no reason to expect any tremendous rush into municipal ownership of electric light plants, and until there is a more noticeable public movement in that direction, the use of electric revenue bonds is likely to continue to be a method of financing resorted to, in the main, by cities which already own their own plants.

The advantages of using electric revenue bonds rather than general obligation bonds do not differ from those in the case of water revenue bonds. They may make possible the financing of an enterprise which otherwise would be impossible, where

the city is confronted by a debt limit; or they may be used to conserve general borrowing power for other purposes; or, as in the case of Los Angeles, they may be used to avoid the necessity of holding an election. The disadvantages are primarily the possible added cost over that involved in general obligation financing.

No defaults on any electric revenue bonds are known to have occurred at any time. This may be partly because of the brief experience with revenue bonds issued for this purpose. Most of the electric revenue bonds are of 1934 origin or later. Thus it is not possible to compare the experiences that various cities have had with their general obligation and electric revenue bonds.

On the whole, electric revenue bonds cannot be rated in the same class as water revenue bonds. In the two largest cities using electric revenue bonds competition from private companies is present. Even apart from such particular circumstances, which may be, and probably will be, corrected, the greater possibility of a successful new substitute than in the case of water, the possibility of competition from other fuels or from Diesel engines privately operated, the controversial factors in the field, the inability to operate on as extensive a scale as the holding companies, the less necessitous character of the service, and the greater possibility of damage to the system are some of the factors which make the electric revenue bonds not quite as attractive investments as are the water revenue bonds.

Sewer

It may surprise some readers to be told that about 400 cities in the United States already make a practice of charging rentals for sewer service.[41] Of course, it is possible to charge sewer rentals and still not make use of sewer revenue bonds. The charging of rentals may simply be a technique adopted for the purpose of causing certain inhabitants to pay into the city's treasury a larger or smaller amount than they otherwise would, or it may represent simply an attempt to operate a service on a self-supporting basis. Chapter 221 of the 1935 Minnesota

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[41] Frank W. Herring, Executive Director of the Amer. Public Works Assn., as quoted in the *Bond Buyer*, XCIV (June 12, 1937), 45.

Laws, sometimes cited as a revenue bond law, is illustrative of a statute which provides for the charging of sewer rentals and for their allocation and disposition, without actually authorizing the issuance of bonds that are to be solely secured by such rentals.

But once the charging of sewer rentals has begun, the transition to using revenue bonds in connection therewith is an easy and natural one, perhaps a desirable one, all things considered, although there is distinct opposition to sewer revenue bonds in some quarters. Some investment bankers contend that sewers constitute a service and not a utility. That being true, they argue that consideration for the health of the inhabitants of a community, as well as concern for the bondholders, requires opposition to a type of revenue bond that is accompanied by a compulsory charge against both the rich and the poor in connection with a vital service. This type of obligation is especially bad, they say, since the failure to collect the charges would endanger the security of the bondholders.

However, the situation as it might exist in the absence of the use of revenue bonds might be worse. F. H. Waring, Chief Engineer for the Department of Health of Ohio, has written "it is quite generally true that the reason for the apparent failure of sewage treatment and disposal engineering is really a financial reason."[42] If the use of revenue bonds will result in the establishment and operation of improved sewage treatment facilities that would not otherwise exist, the use of revenue bonds may be advantageous, on the whole.

A study of the experience of 75 Ohio municipalities showed that while the financing for the original construction was adequately managed there was usually an inadequate arrangement for the necessary operating and maintenance expenses of the systems, once they were constructed.[43] As a result, expensive plants did not perform the service of which they were capable. Revenue bonds are exactly suited to remedy this difficulty with their collateral arrangements for the periodic collection and segregation of moneys, even to the specifying of percentages of the gross revenues to be used for operation and maintenance, as illustrated by the case of the Milwaukee

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[42] *Sewer Rental in Ohio* (2nd ed., no place or publisher, 1934), p. 4.
[43] *Ibid.*, p. 5.

water revenue bonds. In fact, there is an obvious parallel here with water revenue bonds, and the sewer revenue bond laws are clearly an attempt to do for the natural ally of water systems what water revenue bond laws did for the water systems of communities some 25 to 30 years previously. The following pages describe some of the more outstanding sewer revenue bond experiences.

Illinois. Thirty-one of the 49 Illinois sewer projects financed in the 28 months following July 1, 1934, the flush period of the PWA, used revenue bonds. Twenty-seven of the 31 used revenue bonds exclusively; three used a combination of general obligation bonds for a portion of the needs and revenue bonds for the balance, and one used a combination of revenue bonds and treasury funds.[44] The basic statutes relied upon were two acts of 1933[45] and 1934;[46] the former was a sewerage and service charge law, the latter a combined water and sewerage revenue bond law. Prior to 1934 no sewage revenue bonds had been issued in Illinois, only general obligation and special assessment bonds. Twenty-three projects were undertaken under the Act of 1933. Of the 23 resulting bond issues, 10 were sold on the open market (all except two at a 4 per cent basis, the other two on a little higher yield basis), 12 were sold to the United States and one was sold privately. Eight projects were financed under the combination water and sewer revenue law.

In setting the rates one of three methods was used: a payment in accordance with the amount of water consumed, a flat fee per connection, or a flat fee based on the number of water fixtures on the premises. Although the systems are new, only two out of 12 projects operating under the sewer revenue law have reported collections of less than 90 per cent of the total charges levied.

It is sometimes said that whereas general taxation may be discriminatory as against unimproved property, in that charges are made although the benefits received and the uses made of

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[44] C. W. Klassen and W. H. Wisely, "Newer Methods of Sewage Works Financing; Experiences in Illinois," *Water Works and Sewerage,* LCCCIV (March 1937), 89. The description of the Illinois experience is mainly taken from this article.

[45] Laws (1933), p. 276, as amended.

[46] Laws (3rd Spec. Sess. 1933–34), p. 136.

the facilities are insignificant, revenue bonds tend to subsidize the unimproved property in that improvements may be made for which abutting property owners may not be charged as long as they make no use of the facilities. Since it is the custom to make such charges as will retire the debt more rapidly than the plant depreciates, an abutting property owner who begins to use the service at a date when the debt has been well paid down, or even entirely retired, would have to pay less than his share of the total costs, perhaps only his share of the operating expenses. Libertyville, Illinois, takes one short step to correct this fault by making a service charge of $1 per year per vacant lot, but other cities approach the problem somewhat differently by charging the newcomer substantial amounts when a connection is made. This latter method is only a partial solution since some properties may never be connected, and even if they are, the receipts are not likely to be pro-rated among those who have paid excessive amounts in the beginning.

Michigan. In the state of Michigan, 10 communities that have issued sewer revenue bonds are listed in the standard source book.[47] Much the largest sewer loan listed is that of Detroit. The nature of Detroit's sewer revenue bond ordinance and statutory authority has already been explained.[48] No earnings figures can be cited as yet for the Detroit project, since it is still under construction. The city of Detroit is to pay sewerage charges on the basis of an annual water consumption of 1,167,079,420 cubic feet, as against a total of 9,055,293,300 cubic feet used in the city. The city will pay about $227,580 out of an estimated total of $1,765,782, or about one-eighth of the annual revenue. Of course, this contribution will have to come from other funds of the city and, presumably, as a result of taxation. Battle Creek, Monroe, and Ann Arbor are responsible for other sizable sewer revenue bond issues in the state. All of the issues were sold to the PWA.

Ohio. Forty-seven Ohio cities and towns were known, in August, 1937, to have adopted the sewer rental system. The

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[47] Municipal Advisory Council of Michigan, *Statement of Indebtedness of all Governmental Units in the State of Michigan, as of Jan. 1, 1937* (Detroit, Mich., 1937). This is one of the few complete tabulations of the indebtedness of all governmental units in a state that has ever been made public.

[48] See pp. 84–87.

three largest cities in the list were Toledo, Columbus and Dayton. Ten of the 47 ordinances were enacted in 1937.

The Ohio Sewer Rental law was enacted in 1923.[49] It provides that the city or village council may establish just and equitable rates for sewerage service and that such rates "shall constitute a lien upon the property serviced by such connection *and if not paid when due shall be collected in the same manner as other city and village taxes.*"[50] The use of the word "other" indicates that the distinction between taxes and rates or charges is becoming blurred in the minds of the legislators. Other provisions relate to the management of the system and to the reception and distribution of the funds collected.

A critical feature of sewer rental arrangements is the collectibility of the charges. If the recorded experience of communities that charge sewer rentals shows that delays and defaults by the users in making payment are relatively few, then the worry about what would happen in case of nonpayment and about whether it is right or desirable to shut off the user's sewer facilities in case of nonpayments, is useless. In Delaware, Ohio, at the end of the first year's operation, the revenue received was $11,700, with a delinquent sum of $350, or about 3 per cent. After two years' experience "the delinquencies were practically eliminated."[51] Out of 60,000 service accounts in Dayton only six were in the delinquent class. On the whole, it was not found that delinquency was a serious problem in Ohio. The unpaid bills constituted a very small fraction of the total amount due to the sewer rental fund and did not show a higher percentage of delinquency than the water bills.[52]

The common Ohio practice of setting rates just high enough to cover operation and maintenance expenses, accompanied by a resort to general obligation bonds to finance the construction of the project, may be superior to the revenue bond method,

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[49] Laws (1923), p 370. General Code, Sections 3891-1 to 3891-5 and Section 4357.

[50] *Ibid.*, Sec. 3891-1. Italics added. The Nebraska sewer revenue bond law (Laws (1933), c 146, sec 3) similarly provides that sewer charges, if unpaid, "may be certified to the tax assessor and assessed against the premises served, and collected and returned in the same manner as other municipal taxes are assessed certified and returned." The validity of the lien arising out of unpaid charges has been upheld in New York in Robertson *v.* Zimmerman, 268 N. Y. 52, 196 N. E. 740, 744 (1935), passing on New York Laws (1935), c. 349.

[51] F. H. Waring, *Sewer Rental in Ohio*, p 11.

[52] *Ibid.*, p. 12.

since under the straight revenue bond method the present users are charged not only for operation and maintenance but also for the capital cost of improvements that are usually made available to others at some later date at slight cost.

Most of the Ohio cities that charge sewer rentals have not used revenue bonds. By declaring sewage disposal to be a utility—which is permissible under Section 4 of Article XVIII of the Ohio Constitution—the Ohio municipality may issue sewerage revenue bonds under Section 12 of the same article, but Barberton, Ohio, with $231,000 of 4 per cent sewer revenue bonds outstanding is the only Ohio city or town that seems to have availed itself of this law. However, the principles, methods and experiences of the Ohio communities throw light on the desirability and practicality of the sewer revenue bond idea.

Buffalo Sewer Authority. This authority is the largest single sewer revenue bond user in the United States. Because sewer bonds are almost always the obligations of municipalities rather than of authorities, this outstanding example will be treated in this chapter instead of in the chapter that deals with the authorities.

Largely because the city of Buffalo was confronted with debt limit restrictions upon the issuance of general obligation bonds, a public benefit corporation known as the Buffalo Sewer Authority was created, at the city's request, by Chapter 349 of the New York State Laws of 1935. The Authority was authorized to take over the sewerage system of the city of Buffalo and to expand the existing facilities. At the same time it was given the power to establish a schedule of operating charges which should constitute liens upon all the real property served, such liens to rank equally with the general tax liens, and to be foreclosable in the same manner as general tax liens, if delinquent for 90 days or more.

Nine million, three hundred and sixty-five thousand dollars in serial bonds maturing up to the year 1964, and bearing interest at rates varying from 3¼ per cent to 4 per cent have been issued. Additional bonds can be issued on a parity with, but not prior to, those of the original issue up to a total of $15,000,000, if necessary to complete the project. After completion, bonds on a parity with those first sold can be issued only with the prior written consent of the holders of 75 per

cent of all the bonds outstanding.[53] No indenture was used, but the Authority's Resolution of June 1, 1936, provided that the Manufacturers and Traders Trust Company of Buffalo should act as the fiscal agent for the Authority. While there is a pledge of all the revenues to secure the bonds,[54] it appears that allocations from the revenues will be made to take care of operating expenses.[55] Operating expenses were defined in Article I, section 103 of the resolution to "mean the current expenses, paid or accrued, of operating, maintenance and repair of the Facilities and shall include without limiting the generality of the foregoing, insurance premiums, and administrative expenses of the Authority in connection with the Project, and charges for the accumulation of appropriate reserves for expenses not annually recurrent but which are such as may reasonably be expected to be incurred while the Bonds are outstanding, all as calculated in accordance with sound accounting practice." The term, as such, was not to include any charge for depreciation, but provision therefor might be made separately.

Three funds are to be set up: an Operating Fund, a Bond Fund, and a General Reserve Fund. Such monthly payments are to be made into the Bond Fund as to equal, at each principal payment date, 120 per cent of the annual interest and principal payments due, until a surplus equal to two years' needs has been built up. Into the General Reserve Fund at least $60,000 per year must be paid unless that fund shall have a balance of more than $200,000. Deficiencies in any monthly payments "shall be added to the amounts required to be paid into such funds in the next ensuing month." [56]

As to the rates to be charged, the resolution states that "Immediately upon the filing of said certificate of completion the Authority will establish a schedule of rates, rentals and charges to be collected *from all real property* served by the Facilities of the Authority, and will prescribe the manner in which and the time at which such sewer rents are to be paid." [57]

There was no express statement in the original resolution

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[53] *Resolution* (authorizing the $8,250,000 issue), Art. II, sec. 215.
[54] *Ibid.*, Art. IV, sec. 402.
[55] *Ibid.*, sec. 404.
[56] Authorizing *Resolution*, Art. IV, sec. 404.
[57] Art. V, sec. 509. Italics added.

that the city of Buffalo would be under an obligation to pay for services rendered to it, but such payment was consistent with the italicized phrase, and a proposed schedule of charges drawn up early in 1938 so provides.[58]

Subdivision (g) of the resolution provides that "$675,000 shall be collected from all taxable real property in the City of Buffalo by apportioning the said amount upon such taxable property within the City of Buffalo as the same is set down on the last completed annual assessment rolls of the City of Buffalo." This seems to be a transparent evasion of the limitation upon the issuance of tax-supported bonds, and is perhaps a unique instance of the levying of a tax upon municipal property by an Authority.

A second complaint that has been made in respect to the Buffalo arrangement is that while the city made a covenant to complete the project, no penalty bond was furnished to protect the bondholders in case of noncompletion by the contract date.

A supplemental issue consisting of $1,000,000 in 3¼ per cent serial bonds was sold by the Authority October 17, 1938. The new issue is to be subordinate to the original $8,365,000 issue.

The outlook for sewer revenue bonds. The first consideration that arises in most people's minds when the question of sewer revenue bonds is brought up, is: What will people do if their service is discontinued upon nonpayment of charges? There are at least four reasons why the situation may not be as serious as at first appears. First, discontinuance of service for nonpayment of charges is not a necessary feature of revenue bond financing. The statute in Ohio provides that the charges shall constitute a lien upon the property served and if the charges are not paid the statute provides that they shall be collected in the same manner as other local taxes.[59] Collection in the same manner as taxes is the method being followed in "most" of the Ohio municipalities, according to Mr. Waring, although some of the communities do resort to the threat of shutting off the water service as a penalty.[60]

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[58] *"A Resolution to Provide Funds for the Operation, Fixed Charges,"* etc., subdivision (b).

[59] Ohio General Code, sec. 3891–1.

[60] *Op. cit.*, p. 12.

It will be noticed that what is shut off is actually the water service, not the sewer service, the one being essential to the other. That points to a second reason why one is justified in thinking that there is nothing revolutionary about the use of sewer revenue bonds even if the remedy provided may be discontinuance of service. For years water service has been discontinued for nonpayment of charges and no general complaint has followed. As an incident of such discontinuance, of course, the sewer facilities become unusable. Thus the argument against sewage charges runs equally against water charges, where the latter are accompanied by threats of discontinuance for nonpayment of charges, and the argument has not prevented the successful use of a system of billing customers for water consumed.

A third reason, and a weighty one, for thinking that the levying of sewer charges, as incidental to the issuance of revenue bonds, is not a seriously harmful practice, even to the poor, is the experience in states that have used it. The Ohio experience has already been noted.[61] If the delinquent accounts have been negligible no serious harm is being done.

Lastly, the lien runs against the property, not against the occupant, as such, and (to the extent that the poor are usually tenants), the continuance of service is dependent not upon their ability to pay, but upon the ability of the landlord. Also, to the extent that the sewer levy may be in lieu of other taxes, no change in the burden upon the landlord results from the inauguration of a system of sewer rental charges. Where it constitutes an extra burden there is perhaps no more and no less reason for believing that it would eventually be borne by the tenant than if it were an ordinary real estate tax. It seems then that sewer revenue bonds constitute no threat to the welfare of the poor people.

From the standpoints of the municipality and of the investors, sewer revenue bonds have certain weaknesses. In the words of one competent engineer, who was thinking especially of new, small systems, "Sewer bonds as a class are a failure." [62] It is alleged that not enough customers can be gotten in small towns, and service cannot be discontinued as quickly as can

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[61] See p. 160.

[62] W. L. Drager, Chief of the Engineering Section, Self-Liquidating Division of the RFC, in personal conversation with the writer, July 13, 1938.

the water service.[63] In certain parts of the country state health departments are not always strict about compelling sewage disposal, and this reduces the number of connections that might otherwise be expected. In larger cities sewer revenue bonds are more likely to be successful, and even in smaller communities they may be successful, if only sewage disposal is required.

Another effect of the use of revenue bonds, which has been emphasized before, relates to the effect of their use upon the extent of municipal ownership. While not all sewer systems are municipally owned,[64] the exceptions are so rare that no great change in practice can be looked for in this field as a result of the use of sewer revenue bonds.

Miscellaneous Types

Besides being issued for water, electric light and power, sewer, and various combinations of the above purposes, revenue bonds have been issued for a host of other enterprises: garbage collection in Seattle; a cold storage plant in Mobile, Alabama; a hospital, a harbor improvement and a stadium, all in Miami, Florida; swimming pools, as in Moline, Illinois, and Vincennes, Indiana; schools in Kentucky communities; a toll bridge at Louisville, Kentucky; a municipal university in Toledo, Ohio; street railways in Seattle; and gas facilities in Indianapolis, Indiana.

Only two of these uses will be commented on here—gas and education.

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[63] This may be true if the water system is privately owned, or possibly if water is an entirely separate department, but see pp. 163–164, where it was argued that discontinuance of service was not a necessary feature of revenue bond financing. Furthermore, the objection but emphasizes the advantage of combined operations, as in the Illinois Act referred to on p. 158. It is not usually permissible to turn off the water if the water bill is paid and the sewage bill is not, in which case it is practically impossible to disconnect the sewage service for nonpayment of charges. However, Oberlin, Ohio, bills property owners for both services on the same card in two separate items and refuses to receive payment for part of the bill (Waring, *op. cit.*, p. 11).

[64] At least two cities in Kentucky—Hopkinsville and Murray—had privately owned sewers at one time, and apparently the Hopkinsville system still is in private hands. See George W. Meuth, "The Development of Financing Public Improvements by Kentucky Municipalities," 25 *Kentucky Law Jour.* 230, 242 (March 1937). Atlantic City and Ocean City, New Jersey, also are serviced by privately owned sewer companies, and some 50 cities and towns in the state of Texas do not own their own sewer systems. (*Municipal Index: 1936,* "Sewer Rental Laws," pp. 328, 349.)

Gas. Seventy-two municipalities in the United States have been reported as owning and operating their own gas plants, out of a total of 8,707 municipalities served.[65] Seven of these are cities of over 100,000 population. Four cities using gas revenue bonds are listed in the 1938 Moody's Government Manual: Sebring, Florida; Richmond, Kentucky; Mount Vernon, Indiana; and Indianapolis, Indiana. In addition to the first three mentioned there are 18 other PWA gas revenue loans to United States cities.

Indianapolis. A Department of Public Utilities was formed under Indiana laws of 1929 and 1931[66] to manage this city's utility properties. The resulting arrangement is commonly referred to as the Indianapolis Utilities District. In 1935 the city, pursuant to a resolution adopted by the Board of Directors for Utilities of the City of Indianapolis,[67] issued $8,000,000 of 4½ per cent serial gas plant revenue bonds due up to and including the year 1967, in order to acquire the property of the Citizens Gas Company of Indianapolis and to make certain necessary improvements. The city now has a monopoly of the local domestic and commercial gas business. The business is carried on as the Citizens Gas and Coke Utility.

The $8,000,000 of bonds are not issued in the name of the board of the district but by the city, and are signed by city officers in their official capacities. The resolution declares that the "bonds shall have all the qualities of negotiable instruments in the hands of good faith holders,"[68] and that the "bonds shall be exempt from taxation as to principal and income as prescribed by the statutes of the State of Indiana."[69] The bonds are not secured by a mortgage upon the property but the principal and interest payments are declared in the bond itself to be "secured by a charge upon all the revenue from the operation of all of the gas system."[70] It is also plainly stated that the bonds shall not be payable out of taxes, but pledges are made respecting the fixing and collecting of rates by the department. The resolution further provided

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[65] *Brown's Directory of American Gas Companies* (1938 ed.) (Robbins Pub. Co., Inc., New York, 1938), pp. x and i.
[66] Chaps. 77 and 67 respectively.
[67] No. 2-1935, adopted May 7, 1935.
[68] *Ibid.*, p. 3.
[69] *Ibid.*
[70] *Ibid.*, p. 5.

that the proceeds of the bond sale should be kept in a separate fund and used solely for the purposes expressed in the resolution, that one-twelfth of the annual principal and interest requirements would be deposited with an Indianapolis bank on the 15th day of each month, and that such an amount of insurance would be carried on the insurable parts of the system as private companies similarly circumstanced would carry.

A sum equal to the normal taxes is paid to the city in lieu of such taxes, but on the other hand the city pays for any gas furnished to it by the system. In contrast to the rather tentative nature of the Los Angeles electric revenue bond resolution,[71] wherein future changes in important sections are possible, it is stipulated in connection with the Indianapolis bonds, that the resolution will not be amended in any respect which would adversely affect the rights and interests of the holders of the bonds. Additional bonds can be issued only for refunding, or for additions to the plant.

Total operating income in 1937 had increased by more than $1,000,000 from the 1935 total of $5,100,000, while the amount available for interest and depreciation had risen from $873,250 to $1,376,429. This latter amount was not quite four times the sum of the interest charges of 1937 (there were no bond maturities as yet), and amounted to more than three times the service requirements of the years 1938 through 1940 when there will be maturities of principal to meet in addition to the interest. Total debt requirements reach a maximum of $500,000 in 1941 and continue at that figure until 1967, the final maturity date.

A controversy is raging in the courts between the city and holders of bonds of a company whose property was leased to the Citizens Gas Company and taken over from the latter, in 1935, by the city. The city denies that the terms of a lease made in 1913 between two private companies are binding upon it, as successor to the Citizens Gas Company. Holders of the gas plant revenue bonds are not directly concerned and the suit in no way challenges the validity of the gas bonds. A revision of the lease, if the city continues to be as successful in the court proceedings as it has been so far, is likely. This would lower the gas plant expenses of the city and leave greater net rev-

[71] See p. 153.

enues available for debt service charges, but the city has paid into an escrow fund the disputed lease payments throughout the period of the controversy, and the amounts available for interest and principal payments have been calculated on the conservative basis that the city will continue to pay the lessor company in accordance with the terms of the original lease.

The marketing phase of this issue is its most interesting aspect. Here was a huge issue, compared with the typical gas revenue bond offering. The Indianapolis market was not large enough to absorb the issue locally. It was clear that many of the bonds would have to be sold at a distance. Four bids were entered, and while the Halsey, Stuart and Company and Otis and Company bids were not the highest, the other bidders attached too many conditions; Halsey, Stuart and Otis and Company, going together, took the issue, at a discount. The issue was not immediately released to the market. In the meantime the general market improved and a good profit was obtainable, but the issue being so novel, the market required a good deal of support until such time as the bonds could be gotten into the hands of investors who would not trade them but would hold for investment. A second offering of a repurchased lot of $510,000 of the bonds was made in April, 1937, more than a year after the first offering.

It is said that Indianapolis could have borrowed at 3 per cent on general obligation bonds. The difference of 1½ per cent then represents the added cost of revenue bonds—three or four times as large as the usual differential. The excuse must be found in considerations having to do with tax limits, debt limitations, election requirements, and in political considerations that sometimes determine the kind of financing to be done. The first three factors mentioned tend to indict either the restrictions that cause the inhabitants of a city to have to pay 50 per cent more for the funds needed than would be necessary if the limitations did not exist, or else the availability of a method of evasion.

Education. The use of revenue bonds in connection with educational activities has been confined for the most part to the state of Kentucky.

In the early years, that is, from 1909 to 1934, the method used was for a school board to turn over a plot of ground to a nonprofit corporation which would construct a school on the

land and then lease the property to the school board for just enough to cover the costs, including interest and principal payments on the funds borrowed in the corporation's name. The advantage of this method was that it enabled municipalities, in effect, to borrow needed funds despite constitutional restrictions.

Since 1934, 77 buildings or additions have been constructed at a cost of $600,000 under a modified plan whereby the school board turns over the property to another political body which issues the necessary revenue bonds to finance the improvement. This body then leases the property back to the school board as before. Of course, the school board's funds to pay the rentals charged must come from some source, and that source is primarily taxes, so that the revenue bonds are really general tax obligations—a subterfuge! A foreclosable mortgage is not given by the borrowing public body, lest it make the loan a "debt" of the mortgagor, but a statutory mortgage is given which confers upon the bondholders the right to have a receiver appointed in case of a default.[72] In 28 years only one serious default has occurred in 175 issues, and even in this one case no ultimate loss was sustained.

Bridges. There are some municipal and county bridges, such as the City of Louisville bridge, the Dakota County bridge at Sioux City, Iowa, the City of Davenport bridge across the Mississippi River at Moline, Illinois, and the St. Charles County, Missouri bridge. However, because bridges are the conspicuous type of project so far promoted by statutory authorities, it seems better to reserve discussion of bridge revenue bonds for the chapter dealing with statutory authorities.

General Summary

We have, then, municipal revenue bonds used for many purposes of which water is the most important single purpose, judging by number of loans, with electricity most important judged by dollar volume.

From the investor's standpoint it would seem that he could

[72] W. H. Hopkin, "Financing School Building Construction in Kentucky," *Mun. Finance,* X (August 1937), 45, and George W. Meuth, "The Development of Financing Public Improvements by Kentucky Municipalities," 25 *Kentucky Law Jour.* 230 (March 1937).

count on any properly set up water or sewer revenue bond being able to pay, if the community does not lose population.[73] Electric revenue bonds are not so certain to be capable of economic success for the reasons already given; [74] bridge revenue bonds are still less certain, for reasons to be given in Chapter IX, while the other types are less common and therefore of less investment interest.

From the standpoint of municipal finance, water and sewer revenue bonds are the most important because of their broad use at the present time and the slight corporate opposition. The possibilities of refunding general obligation bonds into revenue bonds are tremendous in this field.

From the standpoint of municipal ownership in a relatively new field, electric revenue bonds constitute the biggest opportunity for a large-scale forward movement, but since their use does not lessen total costs of the projects and does not make a radical difference in the incidence of the costs, the urge for municipal ownership, if it comes, will have to come from sources other than the help in financing that may be furnished by revenue bonds.

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[73] See Eastland, Tex. in the Moody Manual. Not very many large towns lose population. The smaller the population the less certain is it of permanence.

[74] See pp. 155–156.

CHAPTER VIII

The Federal Government and Revenue Bonds

AN exposition of the Federal government's activities in connection with the use of revenue bonds is simply another chapter in the long, two-sided story of government aid to business and to political subdivisions. Whereas formerly government aid was usually extended in the form of permissive legislation, grants-in-aid, or a lending of personnel, loans of money have recently been added. It was pointed out in Chapter IV that the Federal government has itself, through the Intermediate Credit Banks, borrowed from time to time by means of revenue bonds,[1] payable, at least technically, only out of the assets of those institutions. It was not until 1932, however, that the government became a party to revenue bond financing by way of accepting such bonds from political subdivisions in exchange for advances of cash.

Reconstruction Finance Corporation

When President Hoover became convinced that the voluntary aid that would be furnished to the country by the National Credit Corporation was certain to be inadequate, steps were taken to have the Federal government take a more active part in local affairs. Using the War Finance Corporation as a model, the Reconstruction Finance Corporation bill was drawn up and enacted.[2] The act became effective January 22, 1932. The purpose of the act, as expressed in the preamble, was "to provide emergency financing facilities for financial institutions, to aid in financing agriculture, commerce, and industry, and for other purposes."

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[1] See p. 74.
[2] 47 Stat. 5, c. 8 (Jan. 22, 1932).

While the law, as passed, empowered the Corporation to raise funds through the issuance of its own securities, such securities were required to be unconditionally guaranteed both as to principal and interest by the Federal government, and therefore can not be classified as revenue bonds. Nor was it intended in the beginning that the Corporation should lend to political divisions or to their agencies.

Authority to receive revenue bonds. The power to lend to political units and their agencies was added, six months after the RFC had been formed, by Section 201 (a) of the Emergency Relief and Construction Act,[3] but such power could only be exercised in connection with loans made for purposes of promoting the construction of "self-liquidating enterprises." [4] Loans under this section were not restricted to political divisions, but the political units were included for the first time. A project was declared to be self-liquidating "if such project will be made self-supporting and financially solvent and if the construction cost thereof will be returned within a reasonable period by means of tolls, fees, rents, or other charges, or by such other means (other than by taxation) as may be prescribed by the statutes which provide for the subject." Thus the law, in not requiring the pledging of taxes, made possible the acceptance of ordinary revenue bonds by the RFC. However, the existence of, and even the pledge of, the power of taxation, where the loan was made to a political body, did not disqualify a project, provided that the users of the utility or service made such periodic payments for the service as would normally be adequate to service the debt. In fact, the additional pledge of the power of taxation might help to prove that the bonds were "fully and adequately secured," as was required by the statute.[5] Thus the special-general type of obligation was also eligible as security for the Corporation's loans, and even the general obligation

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[3] 47 Stat. 709, c. 520 (July 21, 1932).

[4] In 1933, additional power was given to make loans in an amount not to exceed $12,000,000 in connection with the repair and reconstruction of buildings damaged by catastrophe. These loans did not have to be self-liquidating in character, but could be payable solely out of taxation. 48 Stat 20, c. 5 (March 23, 1933) as amended by 48 Stat. 119, c. 55, sec. 8 (June 10, 1933).

[5] 47 Stat. 709, c. 520, sec. 201(f), (July 21, 1932). See, also, Harvey Couch, *Financing the Construction of Self-Liquidating Public Projects through the Reconstruction Finance Corporation* (U. S. Govt. Ptg. Office, Wash., D. C, 1932), p 6.

itself, provided the project was made self-liquidating by a system of charges for services rendered.

The Corporation's authority to approve applications under Section 201 (a) of the Emergency Relief and Construction Act continued for about 11 months, or until June 26, 1933. After that date the Federal Emergency Administration of Public Works, the organization created under Title II of the National Industrial Recovery Act,[6] of June 16, 1933, and now popularly known as the PWA, superseded the Corporation in this particular field. The Corporation, however, was still permitted to advance funds to a borrower any time prior to January 23, 1939, provided the advance was made in pursuance of an application approved prior to June 27, 1933. One year later the law was amended to permit additional advances in those cases where the increased aid was "necessary or desirable for the proper functioning" [7] of a project, contracted for prior to June 26, 1933, or where it would "materially increase the assurance that the borrower will be able to repay the entire investment of the Corporation, including such improvements, additions, extensions, or equipment." [8] At the same time,[9] and also by an act of January 31, 1935,[10] the RFC was given authority to extend the maturities, and to consent to other changes in the "conditions," of loans made under section 201 (a) of the 1932 act.

Under these laws providing for extensions of further loans and for altering the maturities, 16 *supplemental* RFC loans were authorized in the period between September 11, 1934 and May 31, 1938 in a total amount of $179,691,433. Of the 16, seven were revenue bond authorizations, totaling $10,044,000. The California Toll Bridge Authority, with one loan, was responsible for $10,000,000 of this latter total.

Recently, the power to make loans to public bodies, first given to the RFC by the Emergency Relief and Construction Act, and taken away at the time of the setting up of the Federal Emergency Administration of Public Works, was restored, by way of the so-called Glass-Steagall Act.[11] This statute

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[6] 48 Stat. 200, c. 90 (1933).
[7] *Ibid.*, as amended by 48 Stat. 1105, c. 653, sec. 9 (June 19, 1934).
[8] *Ibid.*
[9] *Ibid.*, sec. 10.
[10] 49 Stat. 1, c. 2, sec. 11 (Jan. 31, 1935).
[11] 52 Stat. 212, c. 140 (Apr. 13, 1938).

amended section 5 of the original RFC Act. Some loans to communities have already been authorized under this new amendment.

The second major connection that the RFC has with revenue bonds, other than accepting such bonds directly from borrowing communities in exchange for loans as just explained, is that of purchasing, holding, and reselling revenue bonds taken over from the PWA. This power was first given to the RFC in June, 1934, by the Emergency Appropriation Act for the Fiscal Year of 1935.[12] More will be said about this power and its exercise when the PWA loans, themselves, are discussed.

Revenue bond loans effected. Up to the time that the power of the RFC to make self-liquidating loans to public and private borrowers was withdrawn, the Reconstruction Finance Corporation approved 177 loans for $224,518,750, later increased by the $179,691,433 of supplementary loans to a total of $404,210,183.[13] Of the 177 loans authorized only 103 were completed, including some 10 private corporation loans. Complete cancellation of 74 authorized loans in the amount of $22,991,550, and partial cancellation in other cases in the amount of $8,770,000 have left authorized loans at $372,448,-663, of which $304,138,633 had been completed, as of May 31, 1938[14] (see Table 5). One might say, after a glance at the

TABLE 5

RFC Self-Liquidating Loans
(As of May 31, 1938)

	Total Loans	*Revenue Bond Loans Only*	*All Others*
Number of Loans Authorized	177	43*	135*
Number of Loans Completed	103	43*	61*
Number of Loans Sold	40	17*	24*
Number of Loans Still Owned	63	26	37
Par Value Authorized	$404,210,183	$126,675,000	$277,535,183
Par Value Purchased	$304,138,633	$116,903,000	$187,235,633
Par Value Sold	$ 63,465,991	$ 43,232,200	$ 20,233,791
Par Value Still Owned	$240,672,642	$ 73,670,800	$167,001,842

Source: RFC Headquarters, Washington, D. C.

* One loan was supported partly by revenue, partly by a pledge of gasoline taxes.

[12] 48 Stat. 1021, 1056, c. 648, Title II (June 19, 1934).

[13] Data respecting the nature of RFC loans, defaults, and PWA bonds purchased, were secured at the RFC offices in Washington.

[14] Sixty-seven million, three hundred thousand dollars out of the $68,310,000 of authorized but uncompleted loans relate to two California loans: the Metropolitan Water District and the California Toll Bridge Authority loans.

TABLE 6 *(Continued)*

RFC Revenue Bond Loans

By Types of Enterprise, and by Political Units

B. Authorities, Districts, and Commissions

Borrower	*Type*	*Loan Authorized*	*Bonds Purchased*	*Bonds Still in RFC's Possession*
California Toll Bridge, Cal.	Bridges	$74,300,000	$67,000,000	$67,000,000
N.O. Public Belt Bridge, La.	"	6,000,000*	6,000,000*	
New York State Bridge, N. Y.	"	3,400,000	2,285,000	
Niagara Frontier Bridge, N. Y.	"	2,815,000	2,547,000	
Jones Beach Parkway, N. Y. . .	Parkway	5,050,000	5,050,000	5,050,000
Saratoga Springs Auth., N. Y.	Sanitarium	3,200,000	3,200,000	
Amer. Mus. of Nat. Hist., N. Y.	Planetarium	650,000	650,000	595,000
Univ. of North Carolina, N. C.	Stadium	40,000	40,000	10,000
Total Auth., etc. Loans		$95,455,000	$86,772,000	$72,655,000
Grand Total		$126,675,000	$116,903,000	$73,670,800

Source: RFC Headquarters, Washington, D. C.
* Revenue Bond portion only.

standard, bridges were a distant second, but judged by dollar volume, bridges led all other types (the California Toll Bridge bond issue alone comprising well over half of all the revenue bond volume), with power second, and parkways third. Should the California Toll Bridge Bonds be replaced by bonds sold to the public, as now seems likely, the self-liquidating revenue bonds then originated and held by the RFC would be less than $8,000,000.

Looking at the bonds from the standpoint of the nature of the political unit concerned, Table 6 shows that about 76 per cent in par value of the revenue bond loans completed were authority obligations and only about 24 per cent were obligations of municipalities. Almost 99 per cent of the revenue bonds now held by the RFC are authority bonds.

There have been no changes in the amounts of revenue bonds authorized during the past year, but a small gain took place in the accumulated total of revenue bonds purchased, mainly because of additional advances to the California Toll

Bridge Authority. This addition to the bond portfolio tended to offset the effect of certain sales and maturities, leaving the total of revenue bonds still held by the RFC, as of May 31, 1938, at $73,670,800, as against $73,993,600, on May 31, 1937. Total holdings of the self-liquidating division in the same interval increased from about $212,400,000 as of May 31, 1937, to a little over $240,000,000 at the corresponding date of 1938.

Defaults. Nineteen of the 103 completed RFC self-liquidating loans (71 of which were still owned) were in default, as of June 21, 1937. Eleven of the 19 were revenue bond projects. Water projects led the list of defaults with seven cases. No other type of enterprise had more than one representative.

While the revenue bonds fared more poorly than did the other types of obligations in respect to the number of loans in default, they were about equal, when tested by the percentage of par value loans in default to total loans completed,[15] both groups showing a percentage of slightly over 1 per cent; and the revenue bonds make a much better showing than the other types, when judged by the proportions of defaulted principal and interest in relation to the par value of the completed loans (see Table 7). In such a small number of cases, one or two large defaults can affect sharply the percentage figures, of course, and the showing should not be taken too seriously.

Defaults of both revenue bond and nonrevenue bond projects comprised lapses in meeting interest, or principal, or interest and principal payments, as they came due. Both types showed continuing defaults on payments that were due as far back as the year 1934.

In almost every case of revenue bond default, the reason seemed to be low gross income, and that was usually traceable to the small number of connected services. The small number of 75 and 104 connections secured, for example in two different projects, do not make profitable operation possible.

In some cases attempts were made to have the community increase its contribution for services rendered, e.g., fire hy-

[15] Since the RFC is quite certain that none of the issues that have been sold have defaulted (correspondence dated Nov. 3, 1938), it seems legitimate to compare the amounts of the defaulted revenue loans and the total of all defaulted loans with the total amounts of completed loans for the respective groups, despite the fact that some of the loans of both classes have passed from the portfolio of the RFC.

drant service, while in others, local authorities were asked to raise the rates that were charged to the private users. The report of the RFC representative, as to the success of one such attempt to have the local officials increase the rates, could be duplicated for very nearly every such attempt whether the issue is an RFC, PWA or Wall Street loan: "The City officials are reluctant to increase rates at this time." It is never a

TABLE 7

DEFAULTS ON RFC SELF-LIQUIDATING LOANS
(As of June 21, 1937)*

Type of Loan	*Number of Loans in Default*	*Per cent of Type in Default*	*Prin. & Int. Actually in Default*	*Per cent of Type's Completed Loans*	*Par Value of Loans Involved in Defaults*	*Per cent of Type's Completed Loans*
Revenue Bond Loans	11	25.6	$ 84,630.82	0.08	$1,194,000.00	1.08
All Other Types	8	13.1	318,861.59	0.20	1,797,000.00	1.15
Total Loans . . .	19	18.4	$403,492.41	0 15	$2,991,000.00	1.12

Source: RFC Headquarters, Washington, D. C.

* Percentages are based on the number and dollar volume of loans owned or completed as of May 31, 1937. Figures are the most recent that the RFC would release.

"good time" for city officials to raise rates, and that fact points to an important element in a properly set up issue. From the standpoint of investors, rates ought to be high in the beginning—as high as are likely to be necessary at any time. No voter is going to object if the city officials later reduce the rates when the debt has been paid or substantially reduced, but the thought of ever increasing the rates (express in most revenue bond contracts) might better be given up. The willingness of those served to pay the necessary charges will never be as great, after the initiation of a project, as at its inception.

In two default cases it was announced by the communities that suit would brought against delinquent users, and, in one of the two, discontinuance of service was threatened if the delinquent bills continued unpaid. "Much improvement"

in the general financial outlook was reported in the case of one community project, but in only one. In still another instance, extension of principal payments over a longer period of time was counted on to cure the default, but in other cases it was reported by examiners that such action would not compensate for poor earnings.

In a sample check of 16 cases, where advance estimates of the number of connected services, gross and net earnings could be compared with the results realized a year or two later, it appeared that the number of connected services predicted was overestimated nine out of 16 times. Gross earnings, on the other hand, were overestimated only four time as against 12 cases of underoptimism, but there was a tendency to underestimate expenses of operation which showed itself in the fact that while gross earnings usually exceeded estimates, the net earnings were as often under, as over, expectations.

Six of the 16 instances included in the sample were also default cases. Only one of them appeared in all three checks of overestimation, but all were present in one or more. Two of the six cases exceeded expectations as to net income, yet were in default, which would make it appear that they were hardly self-liquidating, even on paper.

Purchase of securities from the PWA. The second main activity of the RFC relating to revenue bonds is its purchase from the PWA of revenue bonds bought by that organization since June 26, 1933. It was reported May 31, 1938 that 1,572 PWA self-liquidating loans totaling $121,616,138 that had been so purchased were still in the RFC's possession as of May 15, 1938. This total includes both tax obligation and revenue securities but excludes railroad obligations and certain loans that were transferred to the Drainage, Levee and Irrigation Division for servicing. It will be more convenient to complete the story of the revenue bond portion of these PWA loans in the next section, after the manner of their origin and acquisition by the PWA has been described.

PWA

The RFC lending program, insofar as it related to the loans to governmental units, was largely ineffectual because of the requirement that projects be self-liquidating and because of

the high interest rates charged by the RFC.[16] Partly because of this ineffectiveness, but more importantly because the administration that came into office in the spring of 1933 "adopted expanded public works as one of the major parts of its recovery program," [17] a separate organization, the Federal Emergency Administration of Public Works (the PWA), was created.

Legislation. The authority to create the PWA was conferred upon the President by Title II of the National Industrial Recovery Act.[18] It was the duty of the PWA to allot the more than $2,000,000,000 that remained after certain statutory allotments had been made from the original $3,300,000,000 fund. The original fund had been provided for the purposes of the entire act, not for Title II only.

All the powers of the PWA were to be exercised by an administrator. Among his duties was the requirement that he should prepare a comprehensive program of public works, which should include:

> (*a*) Construction, repair, and improvement of public highways and parkways, public buildings, and any publicly owned instrumentalities and facilities;
>
> (*b*) conservation and development of natural resources, including control, utilization, and purification of waters, prevention of soil or coastal erosion, development of water power, transmission of electrical energy, and construction of river and harbor improvements and flood control and also the construction of any river or drainage improvement [required by treaty] . . . ;
>
> (*c*) any projects of the character heretofore constructed or carried on either directly by public authority or with public aid to serve the interests of the general public;
>
> (*d*) construction, reconstruction, alteration, or repair under public regulation or control of low-cost housing and slum-clearance projects;
>
> (*e*) any project (other than those included in the foregoing classes) of any character heretofore eligible for loans under subsection (a) of section 201 of the Emergency Relief and Construction Act of 1932, as amended, and paragraph (3) of such subsection (a) shall for such purposes be held to include loans for the construction or completion of hospitals the operation of which is partly financed from public funds, and of reservoirs and pumping plants and for the construction of dry docks. . . .[19]

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[16] Arthur D. Gayer, *Public Works in Prosperity and Depression* (National Bureau of Economic Research, New York, 1935), p. 88.

[17] *Ibid.*, p. 89.

[18] 48 Stat. 195, c. 90, Title II (June 16, 1933).

[19] Sec. 202 of the National Industrial Recovery Act, Title II.

The statute thus contemplated a myriad of projects that might, and did, result in the issuance of revenue bonds to facilitate their construction. But the projects might be either Federal or non-Federal in character, for the President (acting through the administrator) was empowered "to construct, finance, *or* aid in the construction or financing of any public-works project included in the program prepared pursuant to section 202." [20] Actually, most of the more than $2,000,000,000 available to the PWA was allotted by it for Federal purposes.

The President was also authorized to make grants to states, municipalities, or other public bodies for the construction, repair or improvement of authorized projects, but such grants could not be in excess of 30 per cent of the cost of the labor and materials involved.[21] Such grants naturally decreased the amounts available for loans. The final result of using various parts of the original fund for special allotments, Federal projects, and grants, was that not more than about $433,198,000, out of the $3,300,000,000 fund, were actually loaned to public bodies.[22]

Certain other parts of section 203 of the Recovery Act had a bearing also upon the use made of revenue bonds; thus it was provided that all repayments of loans were to be used to retire the original government obligations issued to raise the funds required to inaugurate the program. This was changed a year later when a revolving fund was created by a statute, under which the PWA could sell the securities accepted from the states, and their subdivisions or agencies, to

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[20] Sec. 203 (a). Italics added. If the government constructed or financed the project directly, of course there would be no loan.

[21] The later Emergency Relief Appropriation Act of 1935 did not specify the maximum percentage that could be given by way of grant. The President in the exercise of the discretion delegated to him by Congress, fixed the amount of the grant at 45 per cent of the cost of the project, where it now stands. As the result of a limiting clause inserted in the 1938 Act renewing the PWA activities, no higher percentage is currently permitted.

[22] See Gayer, *op. cit.*, p. 108. There have been many bookkeeping transfers of funds between the different appropriation accounts. This has brought it about that, in a recent official report of the allocation of the funds appropriated from time to time for the use of PWA, a somewhat smaller portion of the original $3,300,000,000 fund is listed as having been loaned to public bodies. See *Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 75th Congress, First Session, on the Proposed Bill to Extend Until June 30, 1939, the Funds and Authority of the Public Works Administration* (U. S. Govt. Ptg. Office, Wash., D. C., 1937), p. 24.

the RFC or other purchasers and would be able to use the proceeds for new loans.[23]

A second provision of the section was that which stated that sections 202 and 203 of Title II should extend to Hawaii, Alaska, the District of Columbia, Puerto Rico, the Canal Zone, and the Virgin Islands, as well as to the several states. Certain additional revenue bond loans were made possible by this extension of territory.

Still a third statement in the section, that is pertinent to the matter of revenue bonds, was the provision that the President, in his discretion, might extend the benefits of Title II "to any state, county, or municipality notwithstanding any constitutional or legal restriction or limitation on the right or power of such state, county, or municipality to borrow money or incur indebtedness." [24] Of course, the Federal government could not enlarge the powers of the smaller political divisions by the insertion of any such article, and this apparent attempt to circumvent the state and local debt limitation laws was not carried further, except as efforts were made by the Federal government to lease properties, that were acquired under section 203 (a)(3), to local bodies. The courts even forbade that practice.

It has already been pointed out that this act required the RFC to cease approving applications under section 201 (a) of the Emergency Relief and Construction Act, and transferred to the PWA the power formerly possessed by the RFC.

Other acts in succeeding years made new appropriations for PWA use and extended the period in which the PWA could make new loans and grants.[25]

Recently, as a result of the exercise of Presidential discretion over the allocation of Congressional appropriations and of the depletion of the revolving fund, the PWA had all but ceased to function (except in connection with the supervision of loans already completed). Alarmed by the renewed depression Congress once again brought the PWA to life as an active force in promoting domestic construction activities. A

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[23] 48 Stat. 1021, 1056, c. 648, Title II (June 19, 1934).

[24] Paragraph (d).

[25] In addition to a list of acts pertinent to PWA, citations to Executive Orders, by number, and a list of PWA publications, are given in *Terms and Conditions*, PWA Form No. 230 (Fed. Emerg. Adm. of Public Works, Wash., D. C., 1937), pp. 16, 17.

new appropriation of $965,000,000 was made and the previous arrangements as to loans and grants are to be continued.[26] The new act constituted Title II of the Work Relief and Public Works Appropriation Act of 1938, and was itself to be known as the Public Works Administration Appropriation Act of 1938. It extended the life of PWA to June 30, 1941. Because the PWA's interest rate of 4 per cent is high, in the present market, the agency is much more active currently in the grant field than on the side of loans. Consequently our interest is mainly in the earlier program, with its many loans and accompanying revenue bonds.

Legal aspects. The legal difficulties encountered in making PWA loans—and they arose even more in connection with revenue bond issues than they did in the case of general obligation bonds—were encountered both on the Federal lending side and on the side of the local borrower.

Although more than 3,000 PWA allotments were made in connection with water, water and sewer, bridge, and gas projects, as against less than 300 electric power allotments, only four law suits were brought that sought to enjoin the administrator from making grants, or loan and grant agreements, in connection with nonpower loans, as against 92 suits that involved power projects. One of the four nonpower suits involved a water works project, one a sewage disposal plant, the third a drainage system, and the fourth a grade crossing project.[27]

In the first three years of the PWA, allotments were made for some 281 non-Federal electric power projects. One hundred and twenty-five of these allotments provided for the construction of additions to existing plants, and 50 were designed to make possible the construction of power plants to be used by public institutions. Actually only 98 of the allotments were for new community plants that might compete with privately owned utilities.[28] Since construction on some 60 new systems was retarded by litigation, it is clear that a majority of the new plants were affected.

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[26] 52 Stat. 809, 816, c. 554, Title II (June 21, 1938).

[27] Senate Document No. 27, 75th Congress, 1st Sess., 1937, *Injunctions in Cases Involving Acts of Congress* (U. S. Govt. Ptg. Office, Wash., D. C., 1937), pp. 28, 29.

[28] *Non-Federal PWA Power Projects* (Fed. Emerg Adm. of Public Works, 1937), p. iii.

Because of the fact that nearly 90 per cent of the money loaned for the purpose of financing the power plants was secured by revenue bonds, it is natural that such bonds should have been heavily involved in the PWA litigation.[29] But the suits do not hinge on the type of financing used. Rather, the private utility companies in bringing their suits contended that Congress had no authority under the "general welfare" clause of the Constitution, or under any other, "to enact a law providing for loans or grants to municipalities for the construction of public works projects, particularly power plants." [30] In addition they urged the validity of one or more of the following arguments: (1) that if Congress had such authority under the Constitution it improperly exercised the authority in delegating broad power over the distribution of the funds to the President, (2) that the Tenth Amendment, reserving powers to the states, was violated, (3) that the plaintiff's property was about to be taken without due process of law, in violation of the Fifth and Fourteenth Amendments, or (4) that the administrator had no authority to extend the loans and grants.[31]

After securing injunctions in the Federal district courts, but generally losing, on appeal, in the United States Circuit Courts,[32] two test cases finally reached the United States Supreme Court and were decided on the same day. Both cases concerned projects that were financed by revenue bonds. The first case was that of the Alabama Power Company *v.* Ickes.[33] It involved loan and grant agreements with four Alabama communities—Sheffield, Tuscumbia, Florence, and Decatur.

The Supreme Court's major finding was that the utility company, having no exclusive franchise, had no right to challenge the constitutionality of the Federal statutes [34]—Title II of the NIRA, and the Emergency Relief Appropriation Act

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[29] *Ibid.*

[30] *List of PWA Projects Involved in Litigation: Power Division,* PWA Report No. 71295, April 1, 1937 (mimeographed), p. 1.

[31] *Ibid.*

[32] Press Release No. 3151, May 17, 1937 (Fed. Emerg. Adm. of Public Works).

[33] 302 U. S. 464 (1938).

[34] This was the view taken (at least prior to Feb. 5, 1937) by every appellate court which passed upon the question. See Brief for appellees in

of 1935—just because they were taxpayers. The complainants were required to show that they were not only being damaged, but that they were sustaining legal injuries to some right which they possessed. However, because of the lack of exclusive franchises, they could show no right to be exempt from the municipal competition. Thus the decision in the case did not rule directly on the matter of the Congressional authority to make funds available to political subdivisions, the manner in which it exercised its assumed authority, or the administrative methods pursued by its direct and indirect appointees, which were the matters most complained of by the plaintiffs in the lower courts. The Court said, in effect, that even if all such actions were illegal the public utilities had no standing in court to act as the challengers.[35]

The second case was brought by the Duke Power Company and its subsidiary, the Southern Public Utilities Company, against the County of Greenwood, South Carolina,[36] just as that county was preparing to enter upon a development of the Saluda River for electric power purposes. The case was governed by the Alabama Power case already described, and thus the power companies lost their two test suits.

With the ousting of the public utilities from the courts, steps were taken to quash the injunctions that had been granted in some 32 other and similar instances.[37] It was reported February 3, 1938 that the PWA would shortly begin to distribute $61,225,544 in loans, and $38,412,408 in grants, on 61 public power projects in 21 different states. All had been delayed by injunction proceedings.[38]

As distinguished from the Federal government's difficulties, the legal troubles of the local units usually arose out of a challenge to the borrower's right to delegate authority to the

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Nos. 6580, 6583, and 6865 in the U. S. Court of Appeals for the District of Columbia, October Term, 1936, p 119. Revenue bond issues would be especially exempt from attack, since the courts have held that taxpayers, as such, can not question the validity of contracts calling for payments out of earnings only. See Northwestern Light and Power Co. *v.* Town of Milford, 82 F. (2d) 45 (CCA 8th, 1936), and City of Allegan *v.* Consumers Power Company, 71 F. (2d) 477 (CCA 6th, 1934), as cited in brief referred to in this note, pp. 122, 123.

[35] See Duke Power Co. *v.* Greenwood County, 302 U. S. 485, 490 (1938) for a short statement to the same effect.

[36] *Ibid.*

[37] See *Com. and Fin. Chron.*, CXLVI (Jan. 22, 1938), 623.

[38] *The New York Times*, Feb. 3, 1938, p. 9.

Federal government over local affairs,[39] or because of a challenge to its methods of procedure, or because of an alleged lack of authority to negotiate the loan. The first-named difficulty was corrected through an altering of the contract that was used by the Federal government in its dealings with the local units. In a few cases the form of the contract was so changed as to become unilateral in nature. In this type of contract the applicant for a loan no longer promised to let the government supervise local activities, but accepted the government's offer to buy its bonds and extend a grant only by actually doing as the Government desired in respect to labor and material policies.[40] In the majority of cases a new type of bilateral contract was used The second difficulty was best corrected by conforming to the constitutional and statutory provisions, if the departure from the prescribed procedure was material. The third difficulty could, in some cases, be overcome by a resort to revenue bonds. This was especially true if the alleged lack of authority hinged on a threatened overstepping of a debt limitation provision applicable to an attempted use of general obligation bonds. Where the PWA attempted to lease property to local bodies, the courts tended to include the promised rentals in the class of debt that was subject to the constitutional and statutory restrictions. Therefore this kind of arrangement also gave way to revenue bonds. The resort to the use of revenue bonds was occasionally possible under existing legislation; where this was not possible, the passage of the many revenue bond statutes during the years 1933, 1934, and 1935 [41] soon made such an alternative possible.

Lending method. It was on this legislative, executive, administrative, and judicial base just described that the PWA loans and grants rested. The organization set up by the Administrator to handle the applications, both in the early centralized form and later in the decentralized arrangement, emphasized three main divisions: legal, engineering, and financial.[42] The starting point for all loans was in the local

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[39] See, for an example of this rather unusual line of attack, Arkansas-Missouri Power Co. *v.* City of Kennett, 78 F. (2d) 911 (CCA 8th, 1935).

[40] See "Comment," 4 *George Washington Law Rev.* 283 (January 1936).

[41] See Appendix A.

[42] See Gayer, *op. cit.*, p. 96 for an organization chart of the PWA.

application for aid. Resident engineers were appointed for each state, whose duty it was to receive the applications, investigate the contemplated improvements, and submit the applications, accompanied by recommendations, to the Administrator.[43]

Whereas in the case of the RFC loans the projects had to be of a self-liquidating type and the loans were required to be "fully and adequately secured," under the PWA the requirement was only for "reasonably securing" the attendant loans, and the projects did not have to be of a self-liquidating type. The later Emergency Relief Appropriation Act of 1935 did not include any restrictive language in respect to the degree of security required in connection with PWA loans, but the administration, relaxing its requirements somewhat, elected to require "acceptable security." [44] According to Gayer, the Finance Division chose to call a loan reasonably secured if the chances of its being repaid seemed 'better than even'; if if they appeared only 'even' the loan might still be made, provided it seemed likely that the loan would create a relatively large amount of employment.[45]

This requirement that loans should be reasonably secured did not prevent lending to communities that were in default, if the outlook was favorable,[46] nor was ready marketability of the securities that were offered by the borrowers a prerequisite to a loan. In the early days it was required that a governmental borrower should have a balanced budget, or at least be approaching such a state,[47] but not much was heard of this test in the later days.

Making the loan. Applicants for loans were required to

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[43] This state system has been succeeded by a regional arrangement whereby the country is divided into seven regions for PWA purposes. This change took place in November, 1937. For composition of the districts see *Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 75th Congress, Third Session, on the Emergency Relief Appropriation Act of 1939 and Public Works Administration Appropriation Act of 1938* (U S. Govt. Ptg. Office, Wash , D. C., 1938), p. 472.

[44] Philip M. Benton (the then Finance Director of PWA), "Public Bodies and the PWA," *Investment Banking,* VI (Nov. 19, 1935), 55.

[45] Gayer, *op. cit.,* p. 120. Mr. B. W. Thoron, Director of the Finance Division of the PWA, denies the existence of such a rule; letter dated Jan. 31, 1939.

[46] Benton, *loc. cit.*

[47] Fed. Emerg. Adm. of Public Works Circular No. 1, *The Purposes, Policies, Functioning and Organization of the Emergency Administration* (U. S. Govt. Ptg Office, Wash., D. C , 1933), p. 12.

submit "officially certified and up-to-date information concerning [their] financial record and condition." The data, in the case of tax obligations, had to include

> . . . records of population, assessed valuations, outstanding debts (both direct and overlapping) with information as to any past or current defaults, tax rates (both direct and overlapping), tax levies and collections, annual receipts and disbursements in sufficient detail for analysis, and general information as to local industries, transportation facilities and other indices of present resources and prospects of future stability or growth.[48]

In the case of revenue bonds the applicants had not only to supply the same data, but also to comply with the following instructions:

> A. If project is an extension or improvement of an existing system, submit statement with appropriate subdivisions showing for each of the past 3 fiscal years:
> (a) Operating revenue.
> (b) Operating and maintenance expense.
> (c) Net operating revenue and disposition thereof, showing separately principal and interest payments on any existing indebtedness.
> (d) Number of consumers or users, quantity of production, and rates charged.
>
> B. For all revenue-producing projects:
> (a) Submit annual estimates for the life of the loan, with supporting data, of the information asked in (A) above, including annual debt service requirements on any existing indebtedness applicable to the project or system.
> (b) Discuss any unusual conditions affecting present or estimated future operating income and expenses.
> (c) Submit schedule of proposed rates after completion of the project, stating whether such rates are subject to approval by other public authority.
> (d) If the project is for the construction of a new system and the loan is to be secured by a pledge of revenues only, it would be helpful to include in the supporting data a list of signed agreements to make use of the service at the rates proposed.
> (e) If the project is an extension or improvement of an existing system and if all revenues of the entire system as extended or improved cannot be pledged, submit estimates, as in (a) above, for that portion of the revenues which can be pledged.[49]

This partial similarity in the requirements for tax and revenue loans runs through the whole PWA lending process, so

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[48] Benton, *op. cit.*, p. 56.
[49] PWA Form No. 157, p. 4.

that one can say that an application accompanying a revenue bond project, by and large, followed the same general course as the application connected with a general obligation project. They both started with an application to a state PWA engineer, and then were sent to headquarters in Washington. There they would be examined by the legal, engineering, and finance divisions and, if finally approved by the President, would come under the finance division's control. The finance division's supervision would continue as long as the resulting bonds remained unsold. When and if the bonds were sold, the PWA's interest in, and responsibility for, the loan ceased. Thus the differences in treatment would be the differences in the treatment within the divisions, rather than variations in the route followed. Engineering examinations might be somewhat more rigid, when the only recourse was to revenues; legal questions would relate, in some cases, to different statutes and to different contractual provisions;[50] financial examinations would be directed more to the probable earning power in the one case, and more to the tax load in the other.

In the beginning the legal department required the applicant to answer five special questions, or better, groups of questions, where the proposed securities were revenue bonds. These questions related to (1) whether the proposed issue would be considered a debt under the laws of the applicant's state, (2) whether obligations issued for extension or improvement purposes would be considered by the state courts to be debt if payable out of the revenues of the entire plant, (3) whether proposed obligations would be payable from gross or net revenues of the completed system, or only from the gross or net revenues of the extension, (4) what the remedies of bondholders would be in case of a default, and (5) the power of the applicant to make a mortgage or trust indenture, if

[50] The two types of loans are sometimes not very distinguishable, even in this phase. In the case of a general obligation loan to Sandy City, Utah, it was provided under "Rates and Charges" that: "The Borrower will fix and maintain rates and collect charges for the facilities and services afforded by the System which will provide revenues sufficient at all times:

(a) To provide for reasonable expenses of operation and maintenance and for depreciation, and

(b) In so far as possible without exceeding a reasonable charge for the service rendered to pay the interest and sinking fund charges on the Bonds, and on all other waterworks bonds of the borrower."

Taxes were to be levied to the full amount of any difference between revenues and requirements.

such was contemplated.[51] Later, the PWA counsel appeared not to rely upon local interpretations of the law, and asked in connection with both types of loans only for the citation of constitutional, statutory, and charter authorizations empowering the applicant to construct the proposed project and to issue the bonds.[52]

The method of making loans was, in all cases,[53] to send to the prospective applicant:

(a) Seven manila folders
(b) Seven copies of each of the following:
  1. Form of Application and Grant
  2. Form for submitting Engineering Information
  3. Form for submitting Financial Information
  4. Form for submitting Legal Information
(c) Application Record Memorandum
(d) Addressed Return Envelope

One of the folders and one copy of each of the forms was to be retained by the applicants for its files, the other six folders and forms, when filled out, were to be returned to the state office of the PWA, along with six certified application resolutions prepared in accordance with the form of resolution as set forth in the Application Record Memorandum.

The state engineering, legal, and finance sections would check the application and in many cases make an independent investigation. The finance division used a Field Report[54] which was identical for all types of loans. The main divisions of the report were entitled:

1. Applicant
2. Project
3. Loan and Grant
4. Security Proposed by Applicant
5. Security Recommended—Specifications
6. Previous Applications
7. Financial Condition of Applicant

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[51] Fed. Emerg. Adm. of Public Works, Circular No. 2, *Information Required with Applications for Loans to States, Counties, Municipalities, and Other Public Bodies* (Wash., D. C., 1933), pp. 7 and 8.

[52] PWA Form No. 158, pp. 1, 2.

[53] This has been the procedure since June 1, 1935, at least.

[54] PWA Form No. 160.

To this report the finance examiner customarily appended reports under five more divisional headings, numbered consecutively, as follows:

8. Revenues
9. Approvals
10. Comments
11. Conclusions
12. Conditions

Revenue bonds were, of course, named under the fourth and fifth headings if the proposed loan was a revenue bond project, and the content of the "Comments" and of the "Conditions" was apt to be affected by the type of security, whether general obligation or revenue. The only sharp difference in the two reports, however, involved the eighth heading, Revenues. This space was usually left blank in the case of a general obligation bond application, but in the case of revenue bonds it was filled with extended schedules portraying anticipated amounts of operating income, operating expenses and repairs, debt service allocations, surpluses, and number of connected services. These estimates would be carried forward for the life of the proposed issue, and an over-all figure expressing the number of times it was expected that total debt requirements would be covered would be stated. One and four-tenths times was considered to be the "absolute minimum" by one examiner, but there was no official figure. The schedule of rates proposed to be charged for service was also included in this section, as a rule.

Where the bonds were to be general obligation securities the special[55] "Conditions" recommended by the finance examiner were usually not much more than that "the bonds purchased should be in form satisfactory to the Finance Division with a view to facilitating their future marketability," but where the bonds were of the revenue type, the following added conditions are typical:

(1) That the Applicant will create a special water fund in which all net revenues of the water system will be deposited.

(2) That the Applicant will pledge all of the net revenues of the water

[55] "Rules and Regulations," or as it was later called "Terms and Conditions," (evolving from PWA Form No. 166 through Form Nos. 188 and 210 to Form No. 230 as of September 15, 1937), constituted the "standard conditions," and was made a part of all agreements by the PWA.

system for the payment of the principal and interest on the proposed loan and that none of the net revenues can be used for capital outlays until the Applicant has in reserve in the water fund, an amount equal to the next succeeding two years debt service requirements.

(3) Said reserve may be in cash, bonds of this issue or U. S. Government Obligations.

(4) That the Applicant will agree to maintain rates at all times sufficient to meet bond service requirements on the proposed loan.

(5) That the Applicant be obliged to pay reasonable amount for the hydrants or other water services furnished it by the water system.[56]

Once the loan was approved by each of the three main sections (legal, engineering, and finance) in the state where it originated and by the State Director, it went to Washington for approval by the three divisions of the same name located there. The application had next to be approved by the Projects Director, and by the Assistant Administrator, before going to the Administrator and the President. Prior to these last stages the factors governing approval and disapproval were largely those factors that tended to show the future safety or lack of safety of the loan. But towards the end of the examination, in the highest offices, increasing consideration was given to the anticipated social benefit, or as the original Circular No. 1 phrased it: "(1) The relation of the particular project to coordinated planning, and its social desirability." [57]

Final approval would be followed by an "offer" to the applicant to purchase the latter's bonds, with such further conditions as the PWA saw fit to require.[58]

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[56] Town of Union Gap, Wash., Field Report, Sept. 21, 1935.

[57] P. 7. The other tests, in 1933, were: "(2) Economic desirability of the project; *i.e.*, its relation to unemployment and revival of industry. (3) The soundness of the project from an engineering and technical standpoint. (4) The financial ability of the applicant to complete the work and to reasonably secure any loans made by the United States. (5) The legal enforceability of the securities to be purchased by the United States or of any lease entered into between the applicant and the United States."

[58] A typical PWA headquarters docket or folder on a non-Federal loan, whether general obligation or revenue bond, would reveal the following phases of negotiations (and in this order):

1. Application, correspondence, reports, and recommendations.
2. PWA "offer" to make the loan.
3. Report of applicant's acceptance of the offer.
4. Passage of bond resolutions, and other legal proceedings by the borrower.
5. Receipt of transcript of bond proceedings for approval.
6. Payments to applicant.
7. Supervision of construction.
8. Supervision of loan.
9. Repayment or sale of bonds.

Loan agreement. The element which most clearly differentiates revenue bonds from the general obligation variety is the nature of the security that is promised. Two quotations will illustrate, in summary fashion, the security provisions found in revenue bond agreements, as drawn, following acceptance of the government's offer. In the case of a Waldron, Arkansas, loan, the description of the security reads as follows:

> Special obligations of the Borrower, secured by a first lien upon and pledge of a fixed amount of the gross revenues of the Project, which fixed amount shall be sufficient to maintain an interest and bond redemption fund to insure the payment of the interest on and principal of the Bonds as and when the same become due; and a statutory mortgage lien upon the Project.

The second case, that of Huntington, Indiana, reads:

> Special Obligations of the Borrower payable as to both principal and interest from the Sewage Disposal Works Sinking Fund created by the ordinance authorizing the issuance of the Bonds to which Fund is pledged a sufficient amount of the net revenues (such net revenues being the gross revenues of the Sewage Disposal Works including all additions thereto and improvements and replacements thereof subsequently constructed or acquired, remaining after the repayment of the reasonable expenses of operation, repair and maintenance) of the Sewage Disposal Works in each year to pay
>
> (a) the interest on the Bonds becoming payable in such year,
> (b) the necessary fiscal agency charges for paying the Bonds and interest thereon,
> (c) the payment of the Bonds as they become due, and
> (d) a margin of safety, which margin, together with any unused surplus of such margin carried forward from the preceding year shall equal 10 per cent of all the payments so required to be paid into said Sinking Fund: which required payments into the Sinking Fund constitute a first charge upon all the net revenues of the Sewage Disposal Works.

The former case related to an early issue. The bonds were dated January 1, 1934. It is notable for two of its provisions: the one stipulating that the loan was to be payable out of gross earnings, and the one relating to the granting of a statutory mortgage. The former provision reflects the early date of the loan. Later, when the PWA came to realize that allowance for operating expenses and maintenance had to be made, it no longer insisted on a pledge of a portion of the gross earnings. The reference to the statutory mortgage emphasizes the fact that the provisions of the agreement had to be drawn in each case to conform to local statutes. In this instance, the Ar-

kansas law required the inclusion of a mortgage. Similarly, constitutional and statutory provisions account for the many Ohio loans that are secured by a pledge of earnings, a mortgage, and the promise of a 20-year franchise to the recipient of the property in case foreclosure becomes necessary. Where a mortgage was permitted but not required, PWA did not go out of its way to have the mortgage provision included. In its opinion the granting of a mortgage did not greatly strengthen the loan.

The second loan is notable for its provision of a margin of safety fund, and its delineation of what constituted net revenue.

Other terms. Nearly all of the PWA bonds, whether general obligation or revenue bonds, are serial issues. The revenue bonds, in a sample test of some 2½ per cent of the number of loans completed, were found to be, without exception, of the serial variety. As to the length of term, the revenue bonds showed a tendency to a longer life than the general obligation bonds (see Table 8). The average final maturity for the revenue bonds was 24.9 years from the date of the bonds, as against 21.4 for the general obligation bonds. Bonds running as long as 30 years (the longest maturity in any PWA loan) were found in both groups, while the minimum final maturity occurring in a revenue bond issue was 12 years, as against seven for the general obligation bonds.[59]

TABLE 8

MATURITIES OF PWA GENERAL OBLIGATION AND REVENUE BONDS COMPARED *

	General Obligation	*Revenue*
Average term of final serial maturities	21.4 years	24.9 years
Longest term of final serial maturities	30 years	30 years
Shortest term of final serial maturities	7 years	12 years
Average of earliest serial maturities	1.8 years	2.4 years
Average percentage that the last maturity payment is of the first maturity amount	160.1 per cent	204.5 per cent

Source: PWA Headquarters, Washington, D. C.
* The sample consisted of the first 33 general obligation and the first 33 revenue bond loans pulled from the files. All averages are simple arithmetic means except the last, which is based on relative aggregates.

[59] Mr. B. W. Thoron, Director of the PWA's Finance Division, has stated that the PWA has bought some term revenue bonds, and that some of the revenue bonds do run beyond 30 years (despite their failure to show up in the sample); personal correspondence dated January 31, 1939.

There also appeared to be a tendency in the case of revenue bonds to increase the interval between the date of the bonds and that of the earliest maturity to three years, as the years went by. This was due to the discovery that early maturities did not allow enough time to get the project constructed, connections made, and revenues started, before the first principal payments fell due. Consistent with the principle of allowing a longer interval before commencing to retire the principal on revenue bonds than is provided in the case of general obligation bonds, the rate of progression in the amounts to be paid on principal was likewise greater in the case of revenue bonds than with the tax obligations. In the case of the former, the final maturity amount, as shown in the table, averaged to be 204.5 per cent of the first payment, but in the case of the general obligations only 160.1 per cent.[60]

PWA interests charges, in contrast with the RFC practice of lending at varying rates, were always computed on a 4 per cent basis. This was true in the cases of both general obligation and revenue bonds, and no matter what the size of the community, or its credit rating. Both types of obligations could usually be had in either coupon or registered form at the option of the holder. Judged by the percentage of each type sold (see Table 15, p. 211), general obligation bonds were the more salable to the RFC.

Apart from the differences in promised security, the biggest differences between general obligation and revenue bond covenants concerned the provisions respecting the rates to be charged, the disposition of the revenues, and the remedies in case of default. The revenue bond borrower promised to maintain, or if necessary, to change, the rates so that they would be sufficient to cover operation, maintenance, depreciation, and debt service costs. If the rates were not paid it was occasionally provided that they should constitute a lien against the property serviced. As to the disposition of the revenues, the PWA was naturally more insistent upon specific covenants, covenants that would state how the receipts from the enterprise or service were to be allocated, in the case of financing by means

[60] The fact that the maturity amounts and dates in the case of general obligation bonds may be set by statute does not necessarily mean that they would parallel revenue bond practice if the statutory provisions were nonexistent. There are other valid reasons for the differences in treatment.

of revenue bonds, than in those cases in which the borrower made an iron-clad promise to pay that was independent of the adequacy of the project's revenues.

The remedies in case of default consisted primarily in the right to foreclose the mortgage (where there was one),[61] the right to the appointment of a receiver, and the right to have the terms of the bond contract enforced.

While the PWA recommended that insurance be carried in those cases in which the project was a general obligation enterprise, it did not ordinarily require it. On the other hand, it almost invariably demanded that revenue bond projects be insured. If the projected improvement lay at a considerable distance from a fire hazard, the carrying of fire insurance might not be required, but if storm damage was a possibility, it was necessary for the applicant to furnish protection against that hazard. In the cases of water and sewer projects only the insurable parts above ground were included in the policies. This frequently, perhaps usually, resulted in the amount of insurance carried being substantially less than the amount of the related PWA loan.

Supervision. In those cases in which the revenue bonds were sold to the RFC, the latter organization, as long as it held the bonds, provided what supervision of the loans it thought necessary or desirable. Where the RFC has resold the bonds, the project receives little, if any, more supervision than a standard private bond. But where the PWA still owns the bonds it is customary to provide supervision, at least for the ailing loans, and Loan Supervision Form 2—Revised indicates the nature of the later information sought:

Loan Supervision Form 2—Revised

FEDERAL EMERGENCY ADMINISTRATION OF PUBLIC WORKS

FINANCE DIVISION

Borrower ______________________ Docket No. ________

Location of Project ______________________

Operating Statement of__________Utility for______________

(Period for which statement is submitted)

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[61] If the mortgage was of the statutory type, foreclosure was frequently not included as a remedy.

REVENUE AND EXPENSE

1 Operating balance as shown on last statement (date______) $______

Gross Operating Revenue

2. Metered service charges and penalties $______
3 Flat rate service charges and penalties $______
4 Connection charges $______
5. Hydrant rental (from city general funds) $______
6. Miscellaneous revenue (Explain) $______
7. TOTAL REVENUE (add Items 1 to 6 inclusive) $______

Operating Expense

8. Salaries $______
9. Labor and materials $______
10. Power $______
11. Insurance $______
12. Repairs and replacements $______
13 Miscellaneous expense (printing, stationery, postage, etc.) $______
14 TOTAL OPERATING EXPENSE (add Items 8 to 13 inclusive) $______
15 Net operating revenue (Item 7 less Item 14) $______
16 Transfers from operating fund to bond and interest fund @ $ per month $______
17. Balance in operating fund (Item 15 less Item 16) $______
18 Expenditures for extensions and additions $______ $______
19. Transfers to depreciation and reserve fund $______
20 PRESENT OPERATING BALANCE (Item 17 less sum of Items 18 and 19) $______

BOND AND INTEREST FUND

21. Cash balance in Bond & Interest Fund as shown on last statement (______ date) $______
22. Transfers to Bond & Interest Fund (Item 16 above) $______
23. Other transfers to Bond & Interest Fund $______
24. Total funds available for debt service (add Items 21, 22 & 23) $______
25. Amount paid on account of bond principal $______
26 Amount paid on account of bond interest $______
27. Total debt payments (add Items 25 and 26) $______
28. Cash balance in Bond & Interest Fund (Item 24 less Item 27) $______

MISCELLANEOUS INFORMATION

29. Amount of delinquent accounts receivable $______
30. Amount of bills owing and unpaid $______
31. Number of connections at this time
32. Indicate on the reverse side of this sheet the rate schedule now in effect.

EXPLANATION

Item 20 above should represent the amount of deposit in the system's operating fund plus any undeposited funds collected.

If expenditures are shown under Item 18 above, explain their use and necessity in reasonable detail . . . .

. . . .

. . . .

Signature____________________Official Title________________

As soon as construction is started on a project, the PWA district auditor concerned is notified. A staff auditor is then assigned to get in touch with the applicant for the purpose of encouraging the borrower to keep satisfactory records.

After the completion of the project no report is required for the first five or six months. After that time a report is requested every six months if the loan appears to be well protected. If it is in the doubtful class, a report every three months is asked for, and if the loan is in default, a statement of receipts and expenditures is required to be filed every month, along with a statement of the number of connections existing on the first and last days of the month. A state PWA representative may visit the project, and further help may be offered, either by way of an additional loan, if it appears that an improved plant might make it possible to supply a better quality of water, for example, and thus help to make the project a success, or the state PWA engineer may be sent if technical advice is all that appears necessary. The visiting inspectors may also make recommendations for improvement in management practice respecting the collection of bills or the reduction in expenses, as the result of their personal observations.[62]

Grants and revenue bonds. A brief word may be said about the effect of the use of grants upon the revenue bond usage. Where the community has less than 2,000 population the city would, as a rule, be unable to issue revenue bonds and would have to use general obligation bonds, were it not for the grants. This is true because the plant and operating costs, if there is no grant, will almost certainly exceed $7 per capita per year,

[62] The above description of supervision practices is a correct portrayal of the system used at the time PWA was making the loans which are the object of interest in this chapter. Since reorganization along regional lines in November, 1937, the methods now used vary somewhat in conformity with the new organization.

which is close to the maximum payment that a community can afford. There are exceptions, however. A community as small as 500 in population can occasionally make a project pay, if the community and its officials put their minds and hearts to it.

Classification of loans. Although attention, up to this point, has been concentrated on only two types of PWA loans, the general obligation and revenue bonds, actually a number of different kinds of securities were employed, as reference to Table 9 will show. It will be noticed, however, that most of the hitherto unmentioned types are not represented by many instances, or by a large volume of loans, and some are hybrid cases. The most important example of the mixed cases is the revenue-general obligation loan. A sizable number of loans that involved about 2½ per cent of the non-Federal funds distributed by the PWA, resulted from the use of this type of loan. It will be noticed that, of the two main types, general obligation bonds constituted a little over half of the total number of PWA non-Federal loans negotiated to political subdivisions, and about 54 per cent of the dollar volume. Revenue bonds comprised about 40 per cent by both number and sum involved. More than 80 per cent of the revenue bonds were issued without mortgage security.[63]

The most important types of projects financed by revenue bonds judged by number of cases were, in order: water, education, and sewer; but judged by the sums involved the most important enterprises were: bridge, water, education, and sewer services, again listed in order (see Table 10). Of the first-named group, only the water revenue loans exceeded the comparable general obligation loans in number of loans. In dollar volume, the water revenue loans exceeded general obligation water loans by roughly 50 per cent while bridge revenue bonds far outstripped general obligation bridge bonds. A classification of PWA revenue bonds according to the political status of the debtor and by types of enterprise is shown in Table 11. It will be noticed that the state obligations have been issued for the most part in connection with the financing

[63] From August 23, 1937 to March 31, 1938 PWA purchased additional non-Federal securities from public bodies in the amount of $23,128,557; of this total $16,119,400 was represented by revenue bonds.

TABLE 9

NUMBER AND DOLLAR VOLUME OF PWA NON-FEDERAL LOANS TO POLITICAL BODIES BY TYPES OF SECURITY
(As of Aug. 23, 1937)

pe of Security	*Number*		*Volume*	
neral Obligation Bonds		1497		$225,264,484
venue Bonds:		1051		165,973,300
Earnings Lien Only	674		$133,830,400	
Earnings Lien and Mortgage	322		30,071,400	
Earnings Lien, Mortgage, and Franchise	55		2,071,500	
ecial Assessment Bonds		31		3,325,400
ecial-General Bonds:		146		15,546,250
pecial Assessment-General Obligation	33		3,403,100	
Revenue-General Obligation	110		9,954,350	
Revenue, Mortgage-General Obligation	2		861,800	
ncome Tax-General Obligation	1		1,327,000	
scellaneous		14		4,739,822
Revenue and Special Tax	7		365,172	
Gas Tax	4		1,483,000	
General Obligation and Mortgage	1		9,900	
pecial Assessment and Mortgage	1		251,750	
License, Gas, Appropriation, and Tolls	1		2,630,000	
Total		2739		$414,849,256

ource: Figures in this and the following PWA tables were compiled from raw data supplied by PWA, and are as recent as the PWA ıld make possible. The figures cover most of the program of the PWA prior to the present one. The present program brings revenue bonds directly to the PWA.

of educational facilities,[64] that the authorities are largely responsible for the bridge and electric light and power loans, and that the municipalities are primarily interested in water and sewer financing. Table 12 shows the distribution of PWA revenue bonds by states. Texas is revealed as receiving the largest number of loans, but New York, with its large authority loans, got nearly one-third of the revenue bond money. Though not disclosed by the table, Alabama, Arkansas, Kentucky, Ohio, Tennessee, and West Virginia were the leading states in coupling mortgage security with revenue bonds.

Effect upon public ownership. It will be seen at a glance that many of the project types named in Table 10 do not concern utilities, as commonly understood. Even the waterworks loans do not concern a field where there is much controversy as to whether a municipal plant or a privately owned plant is preferable. The controversy rages primarily in the electric light and power sector. Yet, it is evident from the statistics that no great inroads on private ownership, in the electric power field, can be attributed to the PWA or, more narrowly, to its use of revenue bonds. Allotments for 98 new plants that might conceivably displace private plants,[65] and $16,702,000 in completed loans on 30 projects, is something less than a revolution. Furthermore, over $14,000,000 of this $16,702,000 total was loaned to three power districts. Even with the release of the $61,000,000 for 61 projects in 21 states, as the result of the injunction annulments referred to previously,[66] the net numerical addition to the already existing 1,860 municipal plants in this country will not be great. Under the new program a few power loans are being made by the PWA, and some rather large ones are being effected by the RFC in the Tennessee Valley area, but on the whole it must be admitted that neither the PWA, nor the use of revenue bonds, has radically changed the proportions of public and private ownership in this field.

Defaults. At the end of the year 1936, 118 out of the 161 PWA issues in default were revenue bond cases. The 118

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[64] These state obligations may actually be issued by an incorporated Board of Regents, or State Department of Education, in which case the obligor approaches the status of an authority.

[65] See p. 183

[66] See p 185

TABLE 10

NUMBER AND DOLLAR VOLUME OF PWA NON-FEDERAL LOANS TO POLITICAL BODIES BY TYPE OF SECURITY AND BY UTILITY

(As of Aug. 23, 1937)

	Bridge		Educational		Electric Light & Power		Gas	
Type of Security	*Number*	*Volume*	*Number*	*Volume*	*Number*	*Volume*	*Number*	*Volume*
General Obligation	11	$ 1,094,849	647	$56,017,494	11	$ 958,000		
Revenue	12	44,095,000	150	21,753,000	19	15,744,000	21	$994,000
Earnings Only	(10)	(42,052,000)	(113)	(19,761,500)	(13)	(7,346,000)	(13)	(591,500)
Earnings and Mortgage	(2)	(2,043,000)	(37)	(1,991,500)	(5)	(8,270,000)	(7)	(356,500)
Earnings, Mortgage and Franchise					(1)	(128,000)	(1)	(46,000)
Special Assessments			1	190,000				
Special-General	3	2,036,750	24	2,480,500				
Special Assessment-General Obligation			(18)	(1,320,500)				
Revenue-General Obligation	(3)	(2,036,750)	(6)	(1,160,000)				
Revenue, Mortgage-General Obligation								
Income Tax-General Obligation								
Miscellaneous								
Revenue and Special Tax								
Gas Tax								
General Obligation and Mortgage								
Special Assessment and Mortgage								
License, Gas, Appropriations, and Tolls								
Total	26	$47,226,599	822	$80,440,994	30	$16,702,000	21	$994,000

Source: Same as for Table 9.
* Figures in parentheses are sub-totals.

TABLE 10 (*Continued*)

Type of Security	Hospital *Number*	Hospital *Volume*	Roads & Streets *Number*	Roads & Streets *Volume*	Sewer *Number*	Sewer *Volume*	Water *Number*	Water *Volume*
General Obligation	22	$8,635,400	50	$8,694,950	211	$77,784,187	313	$18,967,854
Revenue	18	2,212,000			145	18,485,100	611	29,409,700
Earnings Only	(15)	(1,628,000)			(114)	(16,223,600)	(341)	(16,087,800)
Earnings and Mortgage	(3)	(584,000)			(28)	(1,880,500)	(220)	(11,805,400)
Earnings, Mortgage and Franchise					(3)	(381,000)	(50)	(1,516,500)
Special Assessments			6	260,800	6	1,115,600		
Special-General	1	1,327,000	1	51,000	18	803,000	81	3,184,000
Special Assessment-General Obligation			(1)	(51,000)	(5)	(148,600)	(4)	(98,000)
Revenue-General Obligation					(12)	(649,600)	(77)	(3,086,000)
Revenue, Mortgage-General Obligation					(1)	(4,800)		
Income Tax-General Obligation	(1)	(1,327,000)						
Miscellaneous			6	4,364,750				
Revenue and Special Tax								
Gas Tax			(4)	(1,483,000)				
General Obligation and Mortgage								
Special Assessment and Mortgage			(1)	(251,750)				
License, Gas, Appropriations, and Tolls			(1)	(2,630,000)				
Total	41	$12,174,400	63	$13,371,500	380	$98,187,887	1005	$51,561,554

TABLE 10 (*Continued*)

NUMBER AND DOLLAR VOLUME OF PWA NON-FEDERAL LOANS TO POLITICAL BODIES BY TYPE OF SECURITY AND BY UTILITY

(As of Aug. 23, 1937)

Type of Security	Water and Sewer *Number*	Water and Sewer *Volume*	Multiple Purpose *Number*	Multiple Purpose *Volume*	Miscellaneous *Number*	Miscellaneous *Volume*
General Obligation	33	$4,812,500	51	$11,662,600	148	$36,636,650
Revenue	38	3,168,500	7	11,364,000	30	18,748,000
Earnings Only	(26)	(1,519,500)	(5)	(11,171,000)	(24)	*(17,449,500)
Earnings and Mortgage	(12)	(1,649,000)	(2)	(193,000)	(6)	(1,298,500)
Earnings, Mortgage and Franchise						
Special Assessments			4	160,500	14	1,598,500
Special-General	5	191,000	3	2,094,000	10	3,379,000
Special Assessment-General Obligation	(1)	(23,000)	(1)	(1,600,000)	(3)	(162,000)
Revenue-General Obligation	(4)	(168,000)	(2)	(494,000)	(6)	(2,360,000)
Revenue, Mortgage-General Obligation					(1)	(857,000)
Income Tax-General Obligation						
Miscellaneous					8	375,072
Revenue and Special Tax					(7)	(365,172)
Gas Tax						
General Obligation and Mortgage					(1)	(9,900)
Special Assessment and Mortgage						
License, Gas, Appropriations, and Tolls						
Total	76	$8,172,000	65	$25,281,100	210	$60,737,222

* Includes $12,300,000 Port of New York Authority Tunnel Loan and $2,000,000 New York City Tunnel Authority Loan.

TABLE 11

PWA Revenue Bonds, by Political Units, and by Types of Enterprise
(As of Aug 23, 1937)

Type of Enterprise	Political Unit: Municipality Number	Municipality Volume	County Number	County Volume	District or Authority Number	District or Authority Volume	State Number	State Volume	Total Number	Total Volume
Bridge	4	$2,851,000	3	$2,567,000	4	$36,677,000	1	$2,000,000	12	$44,095,000
Educational	15	756,000	21	964,000	1	148,000	113	19,885,000	150	21,753,000
Electric Light and Power	14	1,109,000	1	161,000	3	14,279,000	1	195,000	19	15,744,000
Gas	21	994,000							21	994,000
Hospital	6	677,000	1	39,000	1	287,000	10	1,209,000	18	2,212,000
Sewer	143	15,127,100			1	3,358,000			144	18,485,100
Water	600	28,133,700	4*	513,000*	1	31,000	7	732,000	612	29,409,700
Water and Sewer	38	3,168,500							38	3,168,500
Multiple Purpose (other)	5	1,704,000			2	9,660,000			7	11,364,000
Miscellaneous	14	2,297,000	3	62,000	10**	15,478,000**	3	911,000	30	18,748,000
Total	860	$56,817,300	33*	$4,306,000*	23	$79,918,000	135	$24,932,000	1051	$165,973,300

Source: Same as for Table 9.
* Includes 3 water loans made to townships in the amount of $351,000.
** Includes 2 tunnel loans in the amount of $14,300,000.

TABLE 12

PWA REVENUE BONDS BY STATES
(As of Aug. 23, 1937)

State	*Number*	*Volume*
Alabama	51	$4,877,000
Arizona	9	1,415,000
Arkansas	99	5,954,500
California	6	528,000
Colorado	5	471,500
Connecticut	..	....
Delaware	..	....
Florida	46	5,883,500
Georgia	3	110,000
Idaho	1	68,000
Illinois	108	7,141,300
Indiana	31	3,451,000
Iowa	5	1,691 500
Kansas	8	1,569,500
Kentucky	84	3,990,700
Louisiana	8	348,500
Maine	..	....
Maryland	..	....
Massachusetts	..	....
Michigan	16	5,469,500
Minnesota	..	....
Mississippi	12	410,500
Missouri	5	1,797,000
Montana	17	3,013,000
Nebraska	4	15,378,000
Nevada	1	264,000
New Hampshire	..	....
New Jersey	1	380,000
New Mexico	25	1,600,100
New York	5	52,928,000
North Carolina	2	297,000
North Dakota	.	....
Ohio	71	3,218,000
Oklahoma	12	2,004,500
Oregon	13	3,027,000
Pennsylvania	1	990,000
Rhode Island	..	....
South Carolina	55	4,706,000
South Dakota	..	....
Tennessee	24	1,218,000
Texas	146	20,154,900
Utah	49	1,262,100
Vermont	..	....
Virginia	24	3,736,000
Washington	16	1,892,000
West Virginia	77	3,606,700
Wisconsin	3	101,000
Wyoming	2	433,000
Alaska	2	120,000
District of Columbia	..	....
Hawaii	..	....
Puerto Rico	4	467,000
Total	1051	$165 973,300

Source: Same as for Table 9.

issues represented $219,000 in delinquent principal and interest, as against $146,000 for the other 43 issues.[67] The face value for the 161 issues was $7,424,000. A little over seven months later the defaults had increased to the degree reflected in the accompanying figures (Table 13).

As of April 19, 1938, Mr. A. J. Plant, chief project accountant for the PWA, testified [68] that the total defaults of principal then were $642,967.69, and that the interest defaults amounted to $437,347.96. This made a default total of $1,080,315.65 that was chargeable to the securities on hand and to those that were in default at the time of transfer to the RFC. Since the total of defaults on principal and interest of bonds still held by PWA was only $65,807.93,[69] this means that on those PWA bonds transferred to the RFC, the delinquent principal and interest, at the time of the report (April 19, 1938), amounted to a little over $1,000,000. To the figure of $1,080,315.65 any delinquencies that occurred after the RFC secured the bonds would have to be added, in order to get a complete picture of the government's position, while to trace completely the entire experience with the securities, the still further history of the PWA bonds that have been resold by the RFC to private investors would need to be secured. Of course, there is no such complete compilation of defaults on securities owned by the public.

In any case there has been a near tripling of delinquencies in a period of about 15 months, while the face value of bonds in default has simultaneously more than doubled.[70] Perhaps this is to be expected in view of the fact that there were still 1,600 uncompleted projects as late as July 1, 1937.[71] The peak of delinquencies would not be likely to come until the principal

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[67] *Bond Buyer,* XCIV (Feb. 13, 1937), 2.

[68] *Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 75th Congress, Third Session, on the Emergency Relief Appropriation Act of 1938 and Public Works Administration Appropriation Act of 1938,* p. 387 (hereafter referred to as *Hearings, Third Session*).

[69] *Ibid.*

[70] The increase has been from the $7,424,000 cited above, to the $15,027,319.39, as of April 19, 1938. *Hearings, Third Session,* p. 388.

[71] *Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 75th Congress, First Session, on the Proposed Bill to Extend until June 30, 1939, the Funds and Authority of the Public Works Administration,* p. 10 (hereafter referred to as *Hearings, First Session*).

TABLE 13

DEFAULTS ON STILL-OWNED PWA NON-FEDERAL LOANS TO POLITICAL UNITS, BY TYPE OF SECURITY
(As of Aug. 23, 1937)

Type	*Number of Loans in Default*	*Delinquent Principal*	*Delinquent Interest*	*Par Value of Bonds in Default*	*Par Value of Bonds Still Owned by PWA*
Gen. Oblig Bonds	31	$29,839 31	$ 27,051 39	$ 1,271,900 00	$23,481,394
Rev. Bonds	150	151,866 00	295,436 90†	14,894,300.00†	67,810,145
Earnings Lien Only	(78)	(85,947.00)	(95,879 56)	(4,281,600 00)	(46,759,326)
Earn. Lien and Mtge.	(63)	(57,619 00)	(194,730 34)†	(10,350,200.00)†	(20,026,119)
Earn. Lien, Mtge., and Franchise	(9)	(8,300 00)	(4,827 00)	(262,500 00)	(1,024,700)
Special Assess. Bonds	2	3,000.00	2,940.00	222,000.00	2,192,800
Special-General Bonds	11	13,000.00	10,627 18	1,043,400.00	7,751,450
Spec. Assess.-Gen. Oblig.	(2)	(200 00)		(7,100 00)	(1,906,800)
Rev.-Gen. Oblig.	(8)	(12,700 00)	(10,627 18)	(1,031,500 00)	(5,770,850)
Rev. Mtge.-Gen. Oblig.	(1)	(100.00)		(4,800.00)	(3,800)
Income Tax-Gen. Oblig.			(No Defaults)		(70,000)
Miscellaneous					253,530
Rev. and Spec. Tax			(No Defaults)		(2,000)
Gas Tax			(No Defaults)		
Gen. Oblig. and Mtge.			(No Defaults)		(8,580)
Spec Assess. and Mtge.			(No Defaults)		(242,950)
Total	194	$ 97,705 31	$336,055 47	$17,431,600.00	$101,489,319

Source: Same as for Table 9.
† One large Authority was responsible for $145,000 of interest in default and for $7,705,000 of the Par Value sum.

maturities and uncapitalized interest payments had begun to fall due, which would normally be some time after the projects were completed.

A factor that has tended to keep delinquencies low, or at least lower than they might otherwise have been, is the PWA's custom of withholding part of the grant money. It has been customary on the 45 per cent grant projects to advance 15 per cent of the project cost as soon as the bonds were sold to the PWA, 10 per cent more when construction of the project was started, another 10 per cent when the project was 70 per cent complete, and the last 10 per cent when the project was completed. This final 10 per cent can be withheld and applied to any delinquencies in the communities' payments. Such delinquent principal and interest payments as the PWA can collect by this means are classified as "technical" and subtracted or excluded from the total defaults.[72] To a certain extent the communities may be relying upon this method of paying their obligations to the PWA and the technical delinquencies may not represent any local distress, or inability to pay from other funds, but where the situation is otherwise, once the grant residuum is exhausted, by assignments in payment of principal and interest items that are due, the defaults will no longer be technical, but real.

While such reservation of grant money tends, for the time being, to decrease the default total, the time required to get a utility under way and service connections made may be cited as a temporary factor tending in the opposite direction —that is, to increase the total defaults.

Taking the revenue bonds only, the defaults according to the type of political unit and kind of enterprise involved, were as shown in Table 14.

Of course, the figures are constantly changing, but by relating the total defaults of revenue and general obligation bonds to the totals of such bonds on hand, the preponderance of revenue bond defaults appears, whether the delinquent principal, interest, or the face value of the defaulted bonds is used as a basis for judging (see Table 13). It will be noticed that the default figures for revenue bonds are anywhere from about 5 to 11 times the respective figures for the general obli-

[72] *Ibid.*, p. 8, and *loc. cit.* in Footnote 68.

TABLE 14

PWA Revenue Bond Defaults by Political Unit and by Type of Enterprise
(As of Aug. 23, 1937)

Type of Enterprise		Municipality Number	Municipality Volume	County Number	County Volume	District or Authority Number	District or Authority Volume	State Number	State Volume	Total Number	Total Volume
Bridge	(1)*			1	$19,000					1	$ 19,000
	(2)*			1	10,480					1	10,480
	(3)*			1	524,000					1	524,000
Educational	(1)			1	2,000			1	$ 5,000	2	7,000
	(2)			3	3,220			2	860	5	4,080
	(3)			3	116,000			2	322,000	5	438,000
Gas	(1)	1	$ 6,000							1	6,000
	(2)	6	10,283							6	10,283
	(3)	6	266,500							6	266,500
Power District	(1)						...			.	......
	(2)					1	$145,000			1	145,000
	(3)					1	7,715,000			1	7,715,000
Sewer	(1)	5	4,751							5	4,751
	(2)	20	19,558**							20	19,558**
	(3)	21	883.600							21	883,600
Water	(1)	61	108,915							61	108,915
	(2)	97	101,656**							97	101,656**
	(3)	111	4,740,200							111	4,740,200
Water & Sewer	(1)	4	6,200							4	6,200
	(2)	3	2,540							3	2,540
	(3)	4	235.000							4	235,000
Multiple Purpose (other)	(1)										
	(2)	1	1,840							1	1,840
	(3)	1	92,000							1	92,000
Total	(1)	71	$125,866	2	$21,000			1	$5,000	74	$151,866
	(2)	127	135,877**	4	13,700	1	$145,000	2	860	134	295,437**
	(3)	143	6,217,300	4	640,000	1	7,715,000	2	322,000	150	14,894,300

Source: Same as for Table 9.
* Code: (1) Principal in default; (2) Interest in default; (3) Par value of issues in connection with which there is some default as to principal, interest, or both.
** Stated to the nearest dollar.

TABLE 15

DISPOSITION OF PWA NON-FEDERAL LOANS MADE TO POLITICAL BODIES
(As of Aug. 23, 1937)

Type of Security	*Purchased by PWA*	Disposition by PWA			
		Sold to RFC	*(Still Held by RFC)*	*Still Held by PWA*	*Sales to Third Parties Maturities, and Cancelled*
General Obligation	$225,264,484	$192,852,613	($17,873,990)	$23,481,394	$8,930,477
Revenue	165,973,300	94,758,100	(15,819,100)	67,810,145	3,405,055
Special Assessment	3,325,400	817,600	583,000)	2,192,800	315,000
Special—General Bonds	14,219,250	6.014,700	(3,689,400)	7,681,450	523,100
Miscellaneous	6,066,822	5,716.672		323,530	26,620
Total	$414,849,256	$300,159,685	($37.965,490)	$101.489.319	$13,200,252

Source: Same as for Table 9.

gation bonds, although the revenue bonds on hand (to which the default figures apply) are less than three times as numerous as the general obligation bonds on hand. Even excluding the one extreme case noted, the revenue bond defaults are still between five and six times as large while constituting only three times the volume.

A natural result of the better record of general obligation bonds is to be found in Table 15 showing the disposition of the bonds. Since the PWA had only the revolving fund to fall back on once its appropriated funds were spent, it tended to sell all the bonds that it could to the RFC. On the other hand, the RFC was under no obligation to buy PWA bonds and stood to lose if there was a net loss on the sum total of transactions. It was, therefore, hesitant about buying bonds which were in default or which it feared might default after the date of acquisition. The table shows that, whereas more than 85 per cent of the general obligation bonds were sold to the RFC and more than 90 per cent of those bought were resold by the RFC, less than 60 per cent of the revenue bonds were sold to the RFC and less than 84 per cent of those sold were resold. More of the PWA's revenue bonds were sold to the RFC at a date subsequent to that of the table, as only some $29,000,000 in bonds altogether were still unsold by PWA as of April 19, 1938,[73] as against slightly over $101,000,000 of bonds still held by the PWA, as of August 23, 1937. The terms of the October 5, 1937, agreement under which the RFC bought about $90,-000,000 worth of bonds,[74] provide, however, that only two-thirds of the face value of the bonds sold must be paid at the time of transfer. The remainder will wait upon the resale of the securities by the RFC.[75]

Table 16 shows the revenue bond default situation by states. Comparison of the figures with those of the total revenue bond loans as included in Table 12 will give some indication of the relative positions of the states.

Not all of the borrowers from PWA take their obligations seriously.[76] In some cases they apparently never expect to

[73] *Hearings, Third Session,* p. 371.
[74] *Ibid*, pp. 369 and 388.
[75] *Ibid.*, p. 371.
[76] See B. W. Thoron, "The Federal Emergency Administration of Public Works," *The Municipal Year Book: 1937,* p. 470.

repay the loans,[77] but the Administrator has fought such ideas vigorously. The difficulties in Point Pleasant, West Virginia, where the court granted the PWA's request that a receiver be placed in charge of the sewer system, were referred to in the chapter dealing with defaults.[78] The case illustrates both the unwillingness of a community to repay a Federal loan and the aggressiveness of the PWA in trying to make the borrower live up to its agreement. Again, the Mayor of Bridgeport, Texas, expressed the point of view held by some nonpayers when he wrote, in a letter to the *Bond Buyer,* in answer to their inquiry about defaults:

> In 1934 the Federal Emergency Administration of Public Works bought an issue of revenue bonds, interest and principal payable only from the earnings of a water and sewer system, then being installed. The entire object of this transaction was to "make work" for unemployed laborers in this section, and it was perfectly understood by all concerned that the interest and sinking fund requirements of this issue of bonds could not be taken care of unless there was a marked change in the economic situation of this vicinity, and the marked change has not taken place. The present earnings of the plant are taking care of about one-half of the interest requirements.[79]

This attitude is sometimes found also as the result of a change in the local administration The new group is not sorry to embarrass a previous administration, and to this end may not strive overhard to make a success of a project started by its predecessors.

At the opposite extreme is the town of Springville, Alabama, where the people voted an extra one cent a gallon municipal gasoline tax, in order to meet their promises on the bonds, when it became apparent that the revenues of the project were going to prove inadequate.

Most of the bonds that were turned over to the RFC were resold, as Table 15 indicated. As of April 19, 1938, a profit of over $11,000,000 was reported to have been realized by the RFC in connection with these resales.[80] The original agreement called for the RFC to turn over any final profit to the PWA. If there should be an ultimate loss it would fall on

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[77] See *Hearings, Third Session,* pp. 384 and 389.
[78] See Chap. VI, p. 129
[79] *Daily Bond Buyer,* CXXVI (June 3, 1937), 1583
[80] *Hearing, Third Session,* pp. 369 and 388 ("Suspense Account").

the RFC. The RFC's periodic press releases on its bond sales of PWA bonds shows that some of the sales are made at a premium, while others are made at substantial discounts.[81] Until the bonds are all sold, it will be impossible to tell how the accounts will finally stand. Under the recent agreement whereby the RFC pays two-thirds of the face value of the $90,000,000 in bonds taken over, at the time of transfer, the ultimate issue is also in doubt.

Summary. The outlook for revenue bonds, if one were to judge by the PWA experience alone, and without allowing for certain extenuating circumstances in connection with such loans, would not be encouraging. Here are 150 revenue bond default cases out of a total of 1,051 loans involving nearly 15 per cent of the number and 22 per cent of the dollar volume, whereas there were only 31 defaults on 1,497 general obligation loans, or about 2 per cent judged by number, and 5 per cent when judged by dollar volume of loans in trouble. Mr. Philip Benton said, in the article already quoted,[82] ". . . we, in adopting and carrying out our lending policies, have necessarily placed the primary emphasis upon the objective which was given to us by Congress—that is the relief of unemployment. . . . The making of loans was an incident to the making of jobs. . . ." That is true enough, and helps to explain the amount of the defaults, but it does not explain the difference in the success attending revenue and general obligation loans. The answer lies elsewhere and is in two parts. First, the principal maturities in the case of revenue bonds are too large and exacting in the early years of the loans. The payments are commonly scheduled to begin at a date three years after the date of the loan. Three years from a probable, or possibly guaranteed, date of completion of the physical plant, instead of three years from the date the loan is made, would not be rash practice, and such action would tend to reduce the amount of revenue bond defaults, especially the early ones. Second, the revenue loans are smaller on the average—much smaller, if the half-dozen huge revenue loans

[81] See *New York Herald Tribune*, July 13, 1938, p. 27, where the prices ranged from a low of $932.50 per $1,000 water system revenue bond of a Texas municipality to a high of $1,071.50 per $1,000 New York City general obligation bond.

[82] Benton, "Public Bodies and the PWA," *Investment Banking*, VI (Nov. 19, 1935), 59.

for bridge, tunnel, and power district purposes are excluded. In that case, the typical revenue bond loan would not exceed 60 per cent of the general obligation loan. As Mr. B. W. Thoron, Director of the Finance Division of the PWA, said early in 1937: "It was expected when the loans were made that some of the smaller revenue bond issues would cause trouble."[82a]

The future of PWA revenue bond loans. Revenue bonds are not playing a very direct part in the $965,000,000 1938–1939 PWA program, not because of past experience, but because most of the present activity of PWA is by way of making grants rather than loans.[83] It was announced November 21, 1938,[84] that thus far in that year the PWA, in connection with non-Federal projects, had made grants of $665,464,591, but had lent only $58,430,883. The lower interest rates that communities can secure outside of the PWA partly explains the small amount of loans of any sort under the new program. It has also been announced that Mr. Jones of the RFC and Mr. Ickes have reached an understanding whereby the RFC will make large loans to public borrowers, when requested, under the recently amended section 5d of the RFC Act, thus releasing PWA funds for grants and, as a net result, promoting a larger number and volume of works. It is under this amended section that the RFC has offered large loans to Utica, New York; Knoxville and Chattanooga, Tennessee; and to the Pennsylvania Turnpike Commission.

United States Housing Authority

The discussion so far has studiously avoided the PWA's activities in the housing field. Starting out with loans to limited dividend companies, then changing to Federal acquisition of property combined with Federal construction and oper-

[82a] "The Federal Emergency Administration of Public Works," *The Municipal Year Book: 1937,* p. 470.

[83] Of course, there will be great use made of revenue bonds as a *result* of the new program. Because of the wider market that was developed for revenue bonds by the PWA's pioneering efforts, communities can, and will, now raise the money that they need to borrow by going directly to the private markets with their revenue bond issues. All that is being claimed in this section is that there is not in the offing a large addition to the PWA's bond portfolio.

[84] P. W. Press Release No. 3518.

ation of new housing facilities, the PWA has now turned over its place in this difficult field to the separate United States Housing Authority. This new organization was created by Congressional Act of September 1, 1937,[85] and is to be perpetual. As a result of the amendment of 1938,[86] the Authority is empowered to borrow $800,000,000 for its needs, and in so doing is authorized to issue its own bonds, guaranteed by the Federal government.

Revenue bonds had no place in the old PWA housing program, but under the new act they are the only type of obligation that is being accepted. The Authority has power to lend up to 90 per cent of the cost of low-rent housing projects, but only to a public agency. This means that the Authority may lend only to a municipality, county, state, or other public body, such as a local housing authority. The borrowing agency must supply the remaining 10 per cent. So far the borrowers have done this either out of donations, or, more commonly, by an agreement to sell the local authority's bonds. to local investors at prices that, in no case, yield a return of more than 3½ per cent.[87] If a capital grant is made, the Authority may not lend more than the cost of the acquisition and development, less the grant. In all cases, those who borrow from the USHA must pay at least the going Federal rate of interest plus one-half of 1 per cent. The maximum allowable maturity on the borrowed funds is 60 years. Most of the loans will probably be made to the local authority corporations, and, since they have no tax power, their obligations are necessarily revenue bonds.[88]

Subsidizing is to take either one of two forms. The first method is that of an annual contribution of not more than a sum equal to the going Federal rate of interest plus 1 per cent of the projects development cost; since the Government is now paying 2¾ per cent on its money and the Authority is lending to borrowers at 3¼ per cent, this amounts to somewhat more than a rebate of the annual interest charge. The second

[85] 50 Stat. 888, c. 896.
[86] 52 Stat. 809, 820, c. 554, Title VI.
[87] USHA Press Release, No. 117 (July 18, 1938), p 8
[88] But they are not revenue bonds in the strict sense that no other source of income other than the proceeds of the project will be used to retire them. since they will be payable, for the most part, out of the USHA annual contributions.

method is a capital grant of not to exceed 25 per cent of the cost of the project, subject to a possible additional 15 per cent grant against labor expenditures in connection with the development, at the discretion of the President. It is expected that most of the grants will be of the annual contribution form rather than by way of the capital grant method.[89]

When annual contributions are to be made, the state, city, county, or other political subdivision in which a project is situated must contribute, in cash, tax remission, or tax exemption, at least 20 per cent of the Authority's contribution.[90] The local contribution is, in practice, usually total tax exemption.[91] USHA contracts for annual contributions may not exceed $28,000,000 per year, and for capital grants, $10,000,000 per year. Such payments are to be made from funds directly appropriated for the purpose from the Federal Treasury.

The maximum amount of revenue bonds that could come into existence as a result of this Act is $650,000,000. Projects are located in 16 of the 33 states that have the necessary local legislation, and tentative arrangements for loans haxe been made in nine others. Not over 10 per cent of the USHA help of all kinds may be expended in any one state. As of December 31, 1938 $320,986,000 worth of loan contracts had been approved and $22,000,000 had already been disbursed. While the program lacks somewhat the variety and potentialities for public utility ownership that makes the PWA's controversial activities particularly interesting, this movement, if successful, could eventually result in multiplying the supply of outstanding revenue bonds several times over.

The methods pursued by the Authority in arranging loans with the local borrowers, as described in the Housing Authority's bulletin,[92] closely resemble the PWA methods already given in detail. Sections of the bulletin that relate to bond purchase, terms and conditions, construction terms and conditions, and to the so-called "kickback" practice are practically

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[89] *United States Housing Authority*, Dept. of the Interior, Division of Research and Information (mimeographed), p. 5.

[90] Actually they are averaging 60 per cent of the Federal contribution, according to the Authority's Press Release No. 117 (July 18, 1938), p. 3 (49 per cent, according to p. 9).

[91] *Ibid.*, p. 10.

[92] *Terms and Conditions*, USHA Form 300, Mar. 10, 1938.

the same as the comparable sections of the PWA bulletins. Largely because it takes time to assemble the slum properties to be improved, and to construct the new buildings, few revenue bonds are actually in the hands of the USHA as yet. In the meantime, the Authority holds construction notes where activities have proceeded far enough to warrant the initiation of fiscal activities. These notes will eventually be exchanged for revenue bonds.

The Authority has two primary sources of protection as regards its investment: first, the municipality is not entitled to receive the Authority's annual contributions as long as there is any unpaid principal or interest, but such funds must first be applied against the delinquencies, and secondly, the Authority, in case of default, may foreclose on the property concerned and bid it in at public sale. Of course, over and above all, it has the right to sue for specific performance of the terms of the contract.

Local Authority laws have been upheld by high courts in New York,[93] Kentucky,[94] Louisiana,[95] and North Carolina.[96] The decision in the North Carolina case gave answers favorable to the Authority on five disputed points: (1) that it was constitutionally organized as a municipal corporation, (2) that its obligations were exempt from state, county, and municipal taxation, (3) that the city had the right to turn over municipal property to it, without monetary consideration, (4) that the city would not be liable to creditors of the Authority for the latter's debts, and (5) that the Authority had the right of eminent domain.

Rural Electrification Administration

Another Federal arm that has been responsible for some revenue bonds is the Rural Electrification Administration. Over 85 per cent in number and percentage of this organiza-

[93] New York City Housing Authority *v.* Muller, 270 N.Y. 333, 1 N. E. (2d) 153 (1936).

[94] Spahn *v.* Stewart, 268 Ky. 97, 103 S. W. (2d) 651 (1937).

[95] State of Louisiana *v.* Housing Authority of New Orleans, 190 La. 710, 182 So. 725 (1938).

[96] Wells *v.* Housing Authority of City of Wilmington, 213 N. C. 744, 197 S. E. 693 (1938).

tion's loans are made to cooperative associations and to private nonprofit corporations.[97] However, 31 projects that were sponsored by political subdivisions had received loans of $7,-997,586 out of a total of $87,119,000 loaned to all borrowers, as of June 30, 1938.[98] The nature of the security behind the loans that were made to the political subdivisions is revealed in Table 17. One can almost say, after a look at the table,

TABLE 17

REA LOANS TO POLITICAL SUBDIVISIONS †
(As of June 30, 1938)

Type	*Number of Loans*	*Volume*
General Obligation Bonds	1	$145,000
Revenue Bonds:		
Pledge of Earnings Only	5	1,071,000
Pledge of Earnings and Mortgage	25	6,781,586
Total Loans	31	$7,997,586

Source: REA Office, Washington, D. C.
† Political subdivisions include states, counties, townships, districts (all kinds), and municipalities.

that, if it is a loan to a political subdivision, it is also a revenue bond issue. Projects, to be eligible for REA loans, must be self-liquidating and this means that before the REA approves of a contemplated enterprise it must appear that all of the funds to be advanced by the REA can be repaid with interest, since the REA makes no grants but is authorized to lend a sum equal to the entire cost of a project.

Tennessee Valley Authority

The TVA makes a few loans to municipalities, but they amounted to less than $400,000, as of June 30, 1938.[99] Because the TVA, for the most part, merely advances funds against long-term contracts, revenue bonds do not play much of a part in the authority's program. But since the contracts are secured by mortgage liens on the electric properties concerned, there is a similarity to revenue bond practice.

[97] *Report of Rural Electrification Administration: 1937* (U. S. Govt. Ptg. Office, Wash., D C., 1938), p. 31.
[98] Correspondence with the REA, dated Sept. 1, 1938.
[99] *Annual Report of the Tennessee Valley Authority for the Fiscal Year Ended June 30, 1938* (n. d.), Vol. II, schedule A.

Works Progress Administration

The WPA makes only grants, but those to whom it makes the grants may be required to make contributions in aid of the project, or projects, involved. The only connection that the WPA would have with revenue bonds would be that the organization frequently advises those public bodies to whom it makes grants how best to secure the funds that the borrowers may require in order to make their contributions. In so doing, the WPA may suggest that the borrowers issue revenue bonds.

Inland Waterways Corporation

The Inland Waterways Corporation has made a few loans to public bodies,[100] but they amount to less than $1,000,000. None of these loans is accompanied by the issuance of revenue bonds, as strictly defined, although some of the loans are, in fact, serviced out of revenues; in the case of the city of Vicksburg, Mississippi, the rental that is paid for the use of the port facilities by the Corporation exactly equals the annual debt service charge which the city owes to the Corporation.

Bureau of Reclamation

The Bureau of Reclamation makes loans to local districts, but such loans are secured by assessments[101] against the property benefited, rather than by pledges of the proceeds from services which the local inhabitant is at liberty to make use of, or to ignore.

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[100] *Report of Inland Waterways Corporation: Calendar Year 1937* (U S. Govt Ptg. Office, Wash., D. C., 1938), p. 16

[101] See 32 Stat. 388 (1902).

CHAPTER IX

Statutory Authorities

English Origin and Practice

STATUTORY authorities,[1] as stated in the chapter on the origin of revenue bonds, first came into existence in England in 1815. They originated in connection with the management of harbors, and today one-third of Britain's 330 harbors are so managed.[2] The main principles that came to be embodied in the statutes may be summarized as follows:

1. Administration of the undertaking by a commission.
2. The commission to be independent of the local municipal corporation.
3. Segregation of the commission's revenues from those of the city.
4. Authorization to borrow money, and
5. All borrowed funds to be secured by the port revenues alone.[3]

From use in connection with ports, the use of authority revenue bonds was extended to the public utility services, so that there are now such non-port authorities in England as the Metropolitan Water Board (London), the Edinburgh and Leith Corporations Gas Commissioners, and the Central Electricity Board.

[1] As told in an address entitled "What Authority Has an Authority?" (delivered on Sept 5, 1933) by Julius Henry Cohen, General Counsel for the Port of New York Authority, the name "Authority" was adopted nearly one hundred years after the birth of the type, as the result of a recommendation made by David Lloyd George. Asked what title should be given the Port of London creation of 1908, and recalling that "practically every sentence [of the creating Act] grants authority to do something," Mr. Lloyd George suggested that the Port of London organization be called an "Authority."

[2] *Public Enterprise,* William A. Robson, editor (George Allen and Unwin, Ltd., London, 1937), p. 13.

[3] Adapted from the booklet, *On the Nature and Origin of Revenue Bonds of Political Subdivisions* (Stranahan, Harris and Oatis Co., New York, 1928), p. 6.

The English authorities can be divided into two classes, (1) local authorities, which are really adjuncts of town governments, and (2) public authorities, which are agencies of the central government.

Most of the local authorities have not practiced revenue bond borrowing, but have, while giving mortgages or pledging revenues, at the same time provided ultimate recourse to the rates, or, as we should say, to the taxes.[4] This is notably true of the Metropolitan Water Board and of the Edinburgh and Leith Corporations Gas Commissioners.[5]

On the other hand, the public authorities, in their borrowing, usually give no recourse to the "rates,"[6] and thus employ true revenue bond principles. Nor do their obligations customarily carry any government guarantee.[7] Thus the Port of London Authority obligations are not guaranteed,[8] and the Central Electricity Board is reported to have raised all of its loans, amounting to £50,000,000, without Treasury guarantee.[9] The British Broadcasting Corporation "has to provide for all capital expenditure out of revenue,"[10] and actually contributes nearly 50 per cent of its gross income to the British Treasury.[11] The Corporation's charter makes no provision for a government guarantee of its obligations.[12] However, the London Electric Transport Finance Corporation, a financing intermediary between the British Treasury and the London Passenger Transport Board, issued £32,000,000 of debenture stock in July, 1935, accompanied by the government's unconditional warranty.[13]

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[4] J. R. Johnson, "The Finance of Publicly Owned Utilities in Relation to the General National or Local Finance," *Public Administration,* IV (October 1926), 382 and 386.

[5] Douglas Knoop, *Principles and Methods of Municipal Trading* (The Macmillan Co., Ltd., London, 1912), p. 121.

[6] J. L. Mackenzie, "The Finance of Publicly Owned Utilities in Relation to the General National or Local Finance," *Public Administration,* IV (October 1926), 392.

[7] *Public Enterprise,* Robson, editor, p. 388.

[8] John Thurston, *Government Proprietary Corporations in the English-Speaking Countries* (Harvard University Press, Cambridge, Mass., 1937), p. 142. But the Authority has received contributions from the central government to the extent of one-half the interest on a portion of its £42,000,000 funded debt, for a period of about 15 years (see *Public Enterprise,* Robson, editor, p. 48).

[9] *Public Enterprise,* Robson, editor, p. 124.

[10] *Ibid.,* p. 98.

[11] *Ibid.,* p. 97.

[12] Thurston, *op. cit.,* p. 142.

[13] *Public Enterprise,* Robson, editor, p. 171.

United States

Authorities ought to be clearly distinguished from "districts," although there is a tendency for the two types of public bodies to "shade insensibly" into one another.[14] Of the two bodies, districts are more apt to be organized for the promotion of governmental activities of a nonrevenue-producing character, and are more likely to be financed out of taxation. By contrast, an authority is usually a self-liquidating organization created to manage a revenue-producing enterprise, and not in possession of the power to levy taxes or special assessments.[15]

Reasons for the existence of authorities. The existence of this additional type of public corporation in the United States is to be accounted for partly by factors that have nothing to do with the type of financing employed, partly by the same constitutional and statutory debt limitations that lie behind the municipal revenue bond statutes, and partly by the unsatisfactory nature of some of the municipal revenue bond laws as enacted.

Thus, in cases where the activities of the projected undertaking are expected to extend across boundaries of state subdivisions, or even across the state territorial limits themselves, authorities may be organized simply for administrative reasons. This is largely the explanation of the choice of the authority form by the Port of New York Authority. Even in those cases in which two or three communities desire to operate a water or electric light system in common, it is not hard to understand why a separate political body should appear to be desirable. Furthermore, there has been some tendency to believe that a project would be more efficiently managed if it were placed in the hands of a board whose sole responsibility should be the able operation of the single enterprise. Another

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[14] Horace A. Davis, "Borrowing Machines," *Nat. Mun. Rev.*, XXIV (May 1935), 329–330.

[15] Before the term "authority" became common the word "district" was naturally applied to all such bodies as are here in mind, whether they had the taxing power or not. It would seem desirable that, in the future, only those bodies having the taxing power should be denominated districts. Cf. the "Districts" authorized under Nebraska Laws (1933), c. 86. These districts are true authorities, as the term is here used, and do not possess the power to levy taxes.

explanation, possibly less creditable to the responsible body, would be the desire to escape from the public liability that might otherwise attach to it in the course of the operation of a proprietary undertaking.

Again, there is a financial reason that is common also to the movement in favor of municipal revenue bonds: the resulting authority's obligations will not result in any increase in the tax burden or in the constitutionally limited indebtedness.[16]

But authorities may also be organized, not simply because their bonds can function satisfactorily as an alternative to available municipal revenue bonds, but because of an absence of, or the inadequacy of, revenue bond legislation applicable to the latter.[17] In the case of South Dakota, the supreme court of the state rendered the local enabling laws all but useless by adhering to the restricted special fund theory, intimating that no previously established income could be pledged as security for payment of a loan about to be negotiated without constituting the obligation a "debt."[18] To circumvent the effect of this decision a new statute was enacted which permitted municipal improvement authorities to be organized with such exclusive right to operate public services within the confines of the initiating municipality as the petition for incorporation might provide.[19] Again, in such of the seven states as have no municipal revenue bond statutes at all, resort to authorities may be the natural step, and possibly the desirable one, if one grants that it is desirable to circumvent the debt limitation provisions and if it appears that it would be easier to secure passage of a statutory authority law than enactment of an orthodox revenue bond statute.

Legality. Although there has been litigation,[20] it may be truthfully said that the right of legislatures to create authori-

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[16] E. H. Foley, Jr., "Some Recent Developments in the Municipal Financing of Public Works," 4 *Fordham Law Rev.* 13, 23 (January 1935)

[17] E. H. Foley, Jr., "Revenue Financing of Public Enterprises," 35 *Michigan Law Rev.* 7 (November 1936).

[18] Hesse *v.* City of Watertown, 57 S. D. 325, 232 N. W. 53 (1930).

[19] It does not appear that a single authority has yet been created under the South Dakota statute, and the act may actually prove to be an abortive attempt to circumvent the state court

[20] Some of the pertinent cases are: Gaynor *v.* Marohn, 268 N. Y. 417, 198 N. E. 13 (1935); Tranter *v.* Allegheny County Authority, 316 Pa. 65, 173 A. 289 (1934); Kelley *v.* Earle 320 Pa. 449, 182 A. 501 (1936); Kelley *v.* Earle, 325 Pa. 337, 190 A. 140 (1937); People *v.* Davis, 277 N. Y. 292, 14 N. E. (2d) 74 (1938).

ties has been no such cause of battle as has the right of the legislative body to give municipalities the power to issue obligations that will not be considered "indebtedness." [21] As Mr. Foley says: "[It is a] well-settled principle of law that a public corporation may be created as a distinct legal entity apart from the state creating it, the debts of which are the debts of the corporation and not the debts of the state." [22] The only exceptions might be in case property belonging to *the state* were to be mortgaged, or if the authority is really a department of the state and is supported primarily out of legislative appropriations.[23]

Types of authorities. Statutory authority legislation in the United States has developed along three lines. Either it has created special public corporations to perform certain functions, or it has enlarged the powers of existing public corporations, so that they may function as authorities, or it has provided general enabling acts under which authorities may be organized if the projectors but conform to the term of the acts. Thus authorities may arise either directly or indirectly as the result of state action. Furthermore, under any one of the three methods named, the authorities may be local [24] or state-wide [25] in the scope of their permitted activities, may be addressed to only one type of activity (e.g., housing), or to many. A Pennsylvania act names twenty-three.[26]

However, what is important for our purpose is not so much the different types of legislation, but what activities are actually being promoted by any of these types, through the use of revenue bonds. It happens that the second type named, the type increasing the powers of some existent corporation or agency, is usually related to the enabling of state educational institutions to finance the construction of buildings, especially

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[21] E. H. Foley, Jr., "Revenue Financing," etc., *passim*.

[22] E. H. Foley, Jr., "Some Recent Developments," etc., 13, 19. See also his "Low Rent Housing and State Financing," 85 *U. of Pa. Law Rev.* 239, 254 (January 1937).

[23] For a discussion of the right of the authority to issue revenue bonds secured by a mortgage, see E. H. Foley, Jr., "Low Rent Housing and State Financing," p. 255.

[24] For an example of a local special law, see N. Y. Laws (1933), c. 145, as amended by Laws (1936), c. 555, Triborough Bridge Authority.

[25] Pa. Laws (1935), No. 191, grants authority to any county, city, town, borough, or township; New Hampshire Laws (1935), c. 121 (State Water Resources Board) also relates to state-wide affairs.

[26] See Footnote 25.

dormitories. The resulting bonds are seldom true revenue bonds, because revenues other than those received directly from the project that is made possible by the financing are usually applied to the servicing of the related debt. The third type, the general enabling act, has been associated most closely with the attempt to promote housing authorities. Since not a single housing revenue bond has yet been issued, as far as is known, nor is very likely to be, apart from the government-aided projects described in the previous chapter, they, too, will be ignored.

This confines the discussion of the statutory authority use of revenue bonds to a survey of their employment by the special authorities created *de novo*. Such special authorities are primarily operators of bridge, electric light and power, and rural electrification projects.

The earliest United States authorities [27] would appear to be the water districts of Maine. Some of the Maine water districts both have the power to levy taxes and exercise that right, but others, such as those of Kennebec, Old Town, Portland, and York, do not have the tax power, and thus must use revenue bonds, if they engage in long term borrowing. The Kennebec District was the first one to be established (1899), while that of Portland was organized in 1907, Old Town in 1925, and York in 1929—all by special acts of the state legislature. These districts are governed by boards of trustees and are independent public municipal corporations, not limited to a single municipality. They may, in fact, include a dozen or more communities. The Portland District had more than $6,600,000 of bonds, carrying coupons varying from 2¼ to 4½ per cent, outstanding, as of January 1, 1938. The coupon rate was about the same as that borne by the city's own obligations, and the Moody rating was the same.

Thus water, the same utility that gave rise to United States municipal revenue bonds, has been responsible for the first authority revenue bonds issued in the United States.

The Port of New York Authority

The early practice of forming water district authorities did not spread rapidly, and it was not until 1921 that the author-

[27] See p. 224 for sense in which "authorities" is here used.

ity principle was widely employed. In that year the biggest authority and simultaneously the largest single issuer of revenue bonds in the United States, apart from the United States Government itself, with its Intermediate Credit Bank debentures, was created in the form of The Port of New York Authority. As of December 31, 1938, it had over $200,000,000 of revenue bonds outstanding.

Obviously copied after the earlier Port of London Authority, even in name, this later addition to the ranks of authority revenue bond issuers is the result of a compact between the two cooperating states of New York and New Jersey, the United States Government through an Act of Congress consenting thereto.[28] This public corporation is administered by 12 commissioners—six from each of the two cooperating states. The commissioners hold office for six years and serve without pay. "The Authority is authorized to purchase, construct, lease and operate terminal and transportation facilities within the Port District. For such purposes, it may borrow money upon its bonds or other obligations. It is, however, expressly denied the right to levy taxes or assessments." [29]

Contents of the resolutions or indentures, as used by authorities in general and by the Port of New York Authority in particular, do not differ fundamentally from the contents of similar legislative enactments and documents as used by municipalities.[30] The table of contents of the Port of New York Authority Basic Resolution which was adopted March 18, 1935, and amended March 25, 1935, conveys a general idea of the typical matters included in such resolutions:

Section 1. Interpretation
Section 2. Establishment and Issuance
Section 3. Purposes
Section 4. Pledge of Revenues

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[28] Citations of the originating and subsequent statutes, also of the various Port Authority resolutions, are given in *The Port of New York Authority: Official Statement,* Aug. 13, 1937, Appendix VIII.

[29] *The Port of New York Authority: A Monograph* (The Port of New York Authority, 1936), p. 14. Much information relative to the Port Authority that lies beyond the immediate purpose of this book will be found in this 92-page document.

[30] Of course, this statement depends for its truthfulness upon the point of view. To a municipal bond attorney there are many unique provisions in the Port Authority's Basic Resolution. To the lay reader the main outlines of the Basic Resolution may seem comparable with those of resolutions as passed by other public bodies.

Section 5. Application of Revenues
Section 6. Sinking Fund
Section 7. Serial Bonds
Section 8. Application of Sinking Fund Moneys
Section 9. Special Reserve Fund
Section 10. General Reserve Fund
Section 11. Form and Execution
Section 12. Pledge and Retirement of Now Outstanding Obligations
Section 13. Sinking Funds and Statutory Reserve Funds of Now Outstanding Issues
Section 14. Investments
Section 15. Miscellaneous Covenants
Section 16. Registrars and Paying Agents
Section 17. Evidence of Ownership
Section 18. Liability
Section 19. Modifications

The first bonds of the Authority were sold in 1926, at which time a $14,000,000 issue of 4½ per cent serial bonds was floated to finance, along with certain state advances, the erection of the Arthur Kill bridges (the Outerbridge and Goethals bridges connecting New Jersey with Staten Island). These bonds were secured by a pledge of the collective revenues of the two bridges.

Before the end of the year an additional issue of $20,000,000 of 4 per cent serial bonds was sold to promote construction of the George Washington bridge across the Hudson River from New Jersey to New York. This issue, too, was secured only by the revenues of the individual project and was accompanied by advances from the two states in aid of construction. It was followed in 1928 by a $12,000,000 issue of 4 per cent bonds for the Bayonne bridge and in 1929 by $30,000,000 more George Washington bridge bonds. The rate of interest paid on this second issue was 4½ per cent.

All of these Port of New York Authority loans were individual loans, secured only by the revenues of the particular enterprise for the construction of which the bonds were sold, and therefore were true revenue bonds.

The Holland Tunnel had meanwhile been completed, in 1927, under separate auspices, and with funds supplied by the states of New York and New Jersey. No revenue bond prac-

tice had, so far, attached to the financing which, up to that time, was handled by the respective states.

When it became apparent that vehicular traffic from the New Jersey coast resort section could go around by way of the Holland Tunnel to Manhattan and on to Brooklyn more rapidly than it could get there by using the more direct Arthur Kill bridges to Staten Island and the ferry service from there, steps were taken to merge the Holland Tunnel into the Port Authority and to make the surplus revenues of every enterprise under the Authority's control available to pay the obligations of every other one.[31] The established pool was entitled a General Reserve Fund, and the enabling acts authorized the building up of a fund from the surplus revenue that would be equal to 10 per cent of the Authority's outstanding bonds that were legal for investment. This pooling was authorized by statutes that were enacted in both states in 1931.[32] From that date it has been unnecessary for the states to make grants in aid of the financing activities of the Port Authority, and all obligations issued in the years beginning with 1931 are secured *pari passu,* with all other bonds of the Authority, by the general reserve fund. The first two issues that followed the enactment of the 1931 legislation, the Inland Terminal and the Holland Tunnel issues described in the next paragraph, were also revenue bond issues, secured by a pledge of the immediate revenues and by the general reserve fund. These were the last Port Authority bonds to carry a special pledge of the revenues of a particular project.[33]

In the year 1931, $16,000,000 of 4¼ per cent serial bonds were sold to finance the construction of the Inland Terminal Building at Eighth Avenue and 15th Street, in New York City, and $50,000,000 of 4¼ per cent serial bonds to repay the states of New Jersey and New York for their expenditures in connection with the Holland Tunnel, which was now turned over to the Port Authority. All of the Authority's

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[31] Even with this help the Series A (Arthur Kill bridges) bonds were quoted on a 9.50 bid–8.00 per cent asked basis, shortly after the Pulaski Skyway was opened. This was equivalent to a price in the sixties for the longest maturities. See *The New York Times,* Dec. 30, 1933, p. 22.

[32] N. J. Laws (1931), c. 5 and N. Y. Laws (1931), c. 48

[33] The temporary Midtown Hudson Tunnel notes of 1933 also carried a special pledge of the net revenues of the tunnel in addition to a pledge of the general reserve fund.

bonds described so far were revenue bonds secured only by a pledge of the revenues (either immediate or in the possession of the general reserve fund) and in no case by a pledge or mortgage of the physical property as such. Also, they were all serial bond issues. From 1933 to the present, however, all issues have been term obligations. Changes in investment fashions partly account for the shift to term bonds. Even in the case of the refunding issues, although the refunding operations were undertaken because the current revenues were insufficient to meet the maturities as scheduled, refunding serial bonds would have been issued, in conjunction with a slower rate of retirement, had the market been receptive to serial bonds at the time.[34]

As of January 1, 1935, the Port Authority's serial bonds averaged 13½ years to maturity, while the average maturity of the general and refunding bonds, issued up to early 1936, was 25½ years based on the sinking fund retirement sched-

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[34] It may also be noted, without meaning to imply that the comments here made apply particularly, or even at all, to the Port of New York Authority experience, that the variable gross income of transportation facilities due to vagaries in the weather for extended periods and other untoward circumstances tend to make the greater flexibility of the sinking fund method attractive to the sponsors of projects and also to the investment banking houses. Some of the latter practically insist upon term and sinking fund arrangements for bridge and construction projects with which they are concerned. Nevertheless, the dangers of such a policy ought not to be overlooked; mere postponement of payment, while it may delay the occurrence of default, does not make an unprofitable enterprise profitable nor necessarily lessen by one iota the ultimate loss. The managers of a bridge may refund a serial issue with a term issue, although the bridge has been barely able to secure enough gross revenue to pay the operating expenses and the interest. Such refinancing, if accompanied by unchanged traffic, may forestall a default for 30 or 40 years, but if the revenues do not increase, the bonds will come due, the bridge will have suffered from wear and tear, and there will be a lack of funds to pay off the bonds, all at one and the same time. The bankers' advice in such matters may possibly be colored by their immediate interest, that there shall not be any default in the near future. Of course, the mere use of serial bonds will not cause the enterprise to be profitable either, but it might well be to the investor's interest, in that the use of serial bonds would warn him that the investment must be written off over time, and it would lead him to invest only in those projects in connection with which the earnings appear to be greater than might be considered adequate under a term bond arrangement.

On the other hand, it ought also to be pointed out that under the serial system the pressure to pay maturities might actually increase the ultimate loss, if any, through neglect of necessary maintenance. To that extent the serial method may make preferred creditors out of the holders of early maturities, and the term method may treat all holders more nearly alike, but this would be true only in those cases in which no bonds are taken up for the sinking fund.

ules.[35] This is certainly a conservative length of life calculation and, if adhered to, the term bonds should prove to be as good investments as the serial bonds.

Fourteen million eight hundred thousand dollars of 4 per cent notes issued to finance the Midtown Hudson Tunnel (now the Lincoln Tunnel) were sold in 1933 and 1934, a small part being taken by the banks but most of the notes going to the PWA. In addition, $2,500,000 George Washington Bridge bonds bearing 3 per cent interest were issued to the state of New Jersey in 1935 in repayment of advances made by that state for the original construction. A similar issue of $2,777,777.78 was made to the state of New York in 1938.

The already mentioned pooling, up until the year 1935, consisted only of uniting such unpledged revenues as were available. To make all the revenues of all the projects equally available for the principal and interest requirements of all the issues, the retirement of those bonds which had been marketed in the early years of the Authority's existence was necessary, since the bonds carried special pledges to the owners. Therefore, in that same year, 1935, the Port Authority began a refunding program whereby it arranged to "call" those outstanding bonds that were associated with a particular structure in all cases where prepayment was permitted. The former issues were replaced by general and refunding bonds bearing interest at rates varying from 3 per cent to 4 per cent. In cases where the bonds were not callable some voluntary exchanges have been effected.[36] All bonds issued after 1931 that are now outstanding in the hands of the public are general and refunding bonds, and all are payable from the pooled funds. No one series has a better claim than another to the funds. Consistent with this policy, all of the issues having a particular claim upon some one property have now been called for redemption, except a George Washington Bridge issue not callable until November 1, 1939, the Inland Terminal bonds, and the Holland Tunnel bonds. The latter two issues are not callable until March 1, 1941.

As of December 31, 1938, there existed $80,936,000[37] of

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[35] *Monograph,* p. 36.

[36] See Appendix I of the Official Statement.

[37] *The Port of New York Authority: Eighteenth Annual Report, Dec. 31, 1938,* p. 57.

these early outstanding bonds which give the holders a special claim on particular revenues in addition to a claim on the pooled revenues. This special position, coupled with varying "call" prices and call dates as between the different issues, results in a difference in price and rating. The Holland Tunnel bonds sell on about a 1.50 per cent basis to the earliest call date and are rated AA by Moody. The George Washington bonds sell on about a .50 per cent basis to the earliest maturity and are rated A, while all other Port Authority bonds carrying a special claim are rated BAA and sell on about a 3¼ per cent basis to maturity.

The remainder of the publicly outstanding funded debt (other than $3,995,777.78 which is owed to New York and New Jersey for advances made by those states towards construction of the George Washington Bridge), $113,234,000, constitutes a first lien on the Lincoln Tunnel, a second claim on the revenues from the George Washington Bridge, Holland Tunnel, and Inland Terminal, and shares equally with the bondholders of those three projects, in all other revenue, including the surpluses from those three projects. All these bonds are entitled General and Refunding Bonds. After the completion of the refunding program in 1941, all outstanding bonds will have an equal right to all the net revenues. Additional general and refunding bonds may be issued from time to time for certain purposes and under certain conditions.[38]

In addition to the general reserve fund, to which contributions are to be made until it equals 10 per cent of the outstanding obligations, there are the sinking funds to be established against the individual issues of the general and refunding bonds and a Special Reserve Fund for the still further security of the general and refunding bondholders. Any funds remaining after servicing the general fund and the sinking funds are to go to the special reserve fund. No reserves are set up for depreciation, as the scheduled payments to the established sinking funds are considered to be a satisfactory substitute. Multi-risk insurance is carried in the amount of $46,943,750 on the Port's properties, the policies covering 35 different possible causes of loss.

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[38] See basic resolution adopted March 18, 1935, as amended, Sec. 3, in *The Port of New York Authority: Official Statement,* Aug. 13, 1937, Appendix XI.

The obligations of the Port Authority, as has been noted, are not obligations of the two interested states, but there is always the possibility that the interested political units would come to the rescue rather than see the facilities languish.[39] This is a potential source of strength that is worthy of consideration by the investor in all cases of revenue bonds.

Until now the Authority has been held to be tax exempt in most phases of its activities, but the tendency is towards a lesser degree of tax exemption for governmental agencies,[40] and the future status as to tax exemption is not clear. All of the Port Authority's bonds are eligible for savings bank, trust fund, and insurance company investment in New York and New Jersey by special stipulation of the respective legislatures.

Analyzed as a single business venture, the Port Authority, in the year ended December 31, 1938, had gross income amounting to $14,142,230, as against operating expenses of $3,-380,118 and interest (together with other income charges) of $6,910,605.[41] After deducting the operating expenses this would be a little over a 1½ to 1 coverage of the interest charges. Gross income has increased every year since the Port began operation (see Table 18), and the net revenue available for interest payments has increased steadily except for very slight drops in 1933 and 1938.

Individually, the Holland Tunnel and the George Washington Bridge have always shown a profit. In 1937, for the first time, the Inland Terminal Building did a little better than pay its way, while the three Staten Island bridges have always fallen short of earning their costs.[42] The Lincoln Tunnel's first full year of operation resulted in a net deficit of $953,857.69 after deducting operating expenses and interest on funded debt.

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[39] *The Port of New York Authority: A Monograph,* p. 42. The nature of the possible New York succor has been limited by the adoption, at the November, 1938, election, of a constitutional amendment (Amendment No. 1). But the possibility still exists. Respecting future revenue bond issues by authorities, it is important to notice that the same amendment also restricts the creation of new authorities.

[40] Helvering *v.* Gerhardt, 304 U. S. 405 (1938).

[41] *Eighteenth Annual Report,* p. 63, Table 1.

[42] General and refunding bonds were sold to provide the funds with which to pay interest on the Arthur Kill bridges in 1935 and 1936 *(Official Statement,* Appendix II).

The Port Authority expects that the present net revenue of approximately $11,350,000 will rise to $14,400,000 in 1941, and to $15,332,000 in 1943, after which no increase is postulated through the year 1979, the latest date at which any

TABLE 18

THE PORT OF NEW YORK AUTHORITY COMPARATIVE INCOME ACCOUNT

Calendar Year	*Gross Income*	*Available for Interest*	*Interest on Funded Debt*	*Net Income*
1928	$ 359,492	$ 272,677	. . . .	$ 272,677
1929	750,573	606,660	$ 630,000	23,340*
1930	840,810	706,684	630,000	76,684
1931	7,510,069	5,891,006	2,288,680	3,602,326
1932	10,270,700	8,133,381	4,474,375	3,659,006
1933	10,134,638	8,111,537	4,998,583	3,112,954
1934	11,138,150	8,678,405	5,823,500	2,854,905
1935	11,975,184	9,214,225	5,868,083	3,346,142
1936	13,103,567	10,218,132	5,789,556	4,428,573
1937	14,050,580	11,225,470	5,723,020	5,502,448
1938	14,635,659	11,139,841	6,794,904	4,344,937

Sources: The Port Authority of New York: A Monograph, p. 80; *The Port of New York Authority: Official Statement*, Aug. 13, 1937, Appendix VI, Exhibit C; *The Port of New York Authority: Seventeenth Annual Report*, p. 59, Table 3; *The Port of New York Authority: Eighteenth Annual Report*, p. 63, Table 1.
* Deficit.

now-contemplated general and refunding bonds mature.[43] In fact, the bonds should all be retired by 1961 if the Authority's expectations as to income and expense come true.[44] On account of the uncertainty as to the success of the Lincoln Tunnel, an estimate was made in 1935 as to the time at which all bonds should be retired if the Lincoln Tunnel brought in *no* revenues and was operated at the same cost as had been estimated in an earlier survey. If the surplus revenues expected to accrue from all of the Port's activities are applied as provided for under the general and refunding plan all the bonds will be retired by 1967, or eight years later than an estimate of 1959, which was based on the expectation that the Lincoln Tunnel would produce a certain gross income. So, taking things at their worst, the outlook would seem to be favorable.

The results of the Port Authority's activities may be summed up thus:

[43] *Official Statement*, Appendix IV.
[44] *Ibid.*, Appendix III.

1. Three of its projects are consistent money losers and probably will continue to be.
2. The Authority's most recent project is likewise losing money, this one at the rate of nearly $1,000,000 per year.
3. One began to pay in the third full year of operation.
4. Two of its projects, the largest two, are very profitable, but one of them was inherited from another public agency.
5. If the separate projects had not been combined, defaults would have occurred.
6. If it were not for the Holland Tunnel, the Authority would not be covering interest and sinking fund charges today.
7. The trend of gross income and net income has been upward.
8. The future, if the refundings in 1939 and 1941 are successfully accomplished, should be satisfactory.

The lessons from the Port Authority's experience seem to be:

1. The state *may* do something to salvage an otherwise bad situation.[45]
2. It would be dangerous to count upon such a remedy, since other profitable enterprises, which can be turned over to a faltering authority, may not always be situated near by.
3. Discrimination shown in purchasing bonds of a public corporation may reward the buyer if selectivity is practiced in choosing those revenue bonds that have a legal priority over other issues.

New York City Parkway Authority. Another authority, whose experience parallels that of the Port of New York Authority in at least two important respects—those of the refunding and pooling operations—is the New York City Parkway Authority, successor to the Henry Hudson and Marine Parkway Authorities.

The Henry Hudson Parkway Authority had been established in 1934 by the New York Legislature for the purpose of providing an independent agency that would construct, maintain, and operate a Harlem River bridge and a short

[45] The possible aid has been restricted but not altogether eliminated by the adoption of the constitutional amendment referred to in Footnote 39.

parkway connecting with the bridge. The project filled a gap in an otherwise extended and heavily used north and south highway running from the southern tip of Manhattan to the northern part of New York State.

An issue of $3,100,000 4 per cent 20-year term bonds was sold early in 1935 in order to finance the erection of the required bridge. Construction was soon started and the bridge was opened to traffic December 14, 1936. The toll charge was fixed at only 10 cents, but the bridge has been an outstanding success. More than 6,600,000 vehicles used the bridge in the first 12 months and 18 days of operation. This heavy traffic resulted in gross operating revenues of $663,719. Operating expenses were only $96,987, leaving $566,732 for interest and amortization purposes.[46] Since interest requirements were only about $130,000 for the 383-day period, the interest coverage ratio was better than four to one. The apparent net income after interest would retire the $3,100,000 in less than eight years, if the net revenues continued unchanged and if they were all applied to the retirement of the debt.[47]

As a result of the heavy movement of traffic the decision was soon made to add a second deck to the bridge. For financing this addition another loan, this time for $2,000,000 at 3½ per cent, consisting of term bonds due in 18 years, was negotiated. This loan was dated April 1, 1937, a date only about three and a half months later than that of the opening of the bridge. Northbound traffic uses the upper level, while southbound traffic uses the lower level.

This new "deck" has recently been opened to use, but if the gross revenues do not increase at all, the earnings will still be sufficient to pay all charges connected with the entire bridge, provided they are used for that purpose only.

The sole source of income of the Henry Hudson Authority was the tolls and such other charges or fees as might be collected. The bonds were therefore secured only by a pledge of the net revenues remaining after payment of operation

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46 *Prospectus* of $18,000,000 New York City Parkway Authority 3½ per cent Revenue Bonds, p. 4.

47 However, the expenses of the first year were less than the probable average cost, because certain expenses that will surely occur in later years did not occur in the first year. Operating revenues also may not be representative. See *loc. cit* in Footnote 46.

and maintenance expenses. Both issues were equally secured and a sinking fund was provided for both.

In contrast with the large volume of traffic and consequent success of the Henry Hudson Parkway Authority is the experience of the Marine Parkway Authority. This Authority, like the Henry Hudson Parkway, was also created in 1934 by the state of New York. It was authorized to build a bridge and to carry on other activities incidental to connecting the southeasterly section of Brooklyn with Rockaway Beach, Long Island. An issue of $6,000,000 of 4¼ per cent sinking fund bonds due in 1960 was sold in December, 1935, and the bridge opened to traffic July 3, 1937. With a bridge toll of 15 cents and a charge of 25 cents for using parking facilities in Jacob Riis Park on the beach, the Authority collected $210,389 in revenue in the not quite six months of 1937 that the bridge was in operation, up to December 31, 1937.[49] In the same period, expenses, excluding interest and amortization of debt and discount, amounted to $107,513. This demonstrated earning power, if projected throughout the year, would provide a maximum sum of about $214,000 per year for interest and other charges, whereas interest charges alone were $255,000 per year.

Unlike the Henry Hudson bridge, the Marine Parkway bridge did not constitute a link in a heavily traveled trunk route. The Marine Parkway traffic is primarily recreation traffic. The number of vehicles using the bridge declined from 401,435 in July, 1937, to 56,807 in December 1937, and 44,188 in February, 1938, or a decrease from the high month of almost 80 per cent.[50] When it became apparent that the Marine Parkway, if forced to stand alone, would not be successful, steps were taken to merge the Brooklyn project with the one in northern Manhattan. By this means the surplus revenues of the Henry Hudson Parkway, over and above operating expenses, were made equally available to pay the interest due on the funds raised to finance the Marine Parkway, as well as to meet the Henry Hudson requirements. In order to accomplish this result, it was necessary to redeem the outstanding bonds of both projects and substitute a new

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[49] New York City Parkway *Prospectus,* p. 4. Parking collections for the whole of 1937 were $44,932.

[50] *Ibid.,* p. 12.

issue. With this in mind a new authority, the New York City Parkway Authority, was created.[51] It succeeded to all the rights, powers, duties, and assets of the two preceding authorities. An $18,000,000 issue of 3½ per cent bonds divided between $13,000,000 in sinking fund revenue and $5,000,000 in serial revenue bonds was then floated in March, 1938. This issue exceeded the amount to be refunded by $6,-285,000, after allowing for call premium and other expenses. The additional funds are to be spent in improvements, mainly in the Rockaway section.

Since the usual characteristics of authorities and revenue bonds, such as absence of taxing power, pledge of net income, and covenant to maintain such rates as will be "at least sufficient to pay all expenses of operation of the Parkways and interest, principal and minimum sinking fund payments as they become due"[52] are but repeated here, the exact provisions of the authorizing resolution will not be given in detail.

Estimates of prospective receipts and earnings of the combined facilities made by consulting engineers indicate a probable gross income starting at $1,531,000 in 1939 and increasing to $2,266,000 by 1954, with operating expenses never exceeding $550,000 a year and interest never exceeding $630,000. Interest, sinking fund, and serial redemption payments combined never exceed $1,120,000. The estimated net revenues, after operating expenses, in every year after 1939, are in excess of the maximum total bond service payments in any year and average about 1.5 times such requirements.

The Brooklyn and Rockaway improvements are protected against nearby competition by a covenant of the state of New York, but the Henry Hudson bridge is enjoying its present prosperity despite a nearby free bridge, and with no covenant protecting the Hudson bridge from additional competition. The authorizing act expressly provides that the bonds shall be legal investments in New York State. It also makes provision for the appointment of a receiver, in case of default.

Lake Champlain Bridge Commission. A third case of somewhat similar nature is that of the Lake Champlain Bridge Commission. This authority was created in 1927 by

[51] Laws (1938), c. 90.
[52] *Prospectus,* March 29, 1938, p. 2.

a compact between the states of New York and Vermont, with the consent of Congress.

The original issue was one of \$1,000,000 4¼ per cent first mortgage revenue bonds, due serially to 1958. The serial repayments began at \$20,000 in 1940 and jumped to \$50,000 for the years 1941 to 1950, and then to \$60,000 for the remaining period. The bridge, known as the Crown Point Bridge, was opened in 1929.

By a refunding operation in 1936 the interest rate was reduced to 3¼ per cent, and a sinking fund, to consist of "the net tolls and revenues from said bridge"[53] for the current year, after allowing for operating expenses and the succeeding year's interest, was set up. Thus a payment depending upon the amount of the bridge's net revenues, if any, was substituted for a fixed yearly payment. At the same time, as might be expected, the form of the issue was changed from the serial to the term variety, and the final maturity date was postponed from 1958 to 1966.

At the time of the refunding, the new bonds were given a lien on surplus revenues from a second bridge which had been built at the other (north) end of the lake in 1936. Both bridges are owned and operated by the Commission, but the one at the north end, the Rouses Point bridge, is not secured by a mortgage.

Prior to the refunding, the Crown Point bridge was producing total revenues of only about \$65,000 a year[54] and owed fixed interest charges of \$42,500 per year. After operating expenses which approximated \$12,000 a year were deducted, along with the interest charge, there were only about \$11,000 left for bond retirement purposes. That boded ill for the serial bond payments, and even with the reduction in the interest rate the original serial payments could not have been made, apart from considerably increased operating revenues unaccompanied by increased operating expenses.

All three of these authority cases, then, involve refunding of existing indebtedness (almost always accompanied by lower interest rates), the pledging of additional sources of revenue

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[53] Lake Champlain Bridge Commission Indenture of Mortgage, July 1, 1936, Art. 18.

[54] At the peak, 1930, it amounted to only \$79,620.20, according to the offering circular on the refunding issue.

not previously promised to the original bondholders, the co-operation of the legislative body, or bodies, in making the changes possible, and, in two of the three cases, the substitution of sinking fund obligations for serial bonds.

If the near failures are a warning to investors, the provision of aid which they had no legal right to demand is a favorable sign from the buyers' standpoint. Such aid shows that the support for the revenue bonds may be, and at least in some states is, more than that legally required. This moral support, when present, has real market value, and its absence may make bonds that are apparently legally secure sell below their presumptive worth.

Kentucky. Two early and important users of bridge revenue bonds that were borderline authorities were the Louisville Bridge Commission and the Kentucky State Highway Commission. The former is an agency of the city of Louisville, while the latter is a full-fledged arm of the state, in charge of the state's highway system. Thus both Commissions are less autonomous than the usual authorities.

The second American body to put bridge revenue bonds on the market was the city of Louisville, Kentucky. In 1928 the city financed a bridge across the Ohio River, between Louisville and Jeffersonville, Indiana, by issuing $5,500,000 City of Louisville revenue 4½ per cent serial bonds. The bridge is operated and managed by the Louisville Bridge Commission, organized for that purpose by the city.

Unlike the New York experience where there have usually been modest contributions in aid of the project from state or local sources in addition to the revenue bond financing, there were no contributions from either the state or the city in the case of the Louisville Bridge.[55] Two refundings have brought the rate of interest down, first from 4½ per cent to 3¾ per cent and then from 3¾ per cent to 3 per cent. Likewise, the outstanding amount was reduced from $5,500,000 to $4,400,000, as of October 31, 1937.

Four possible hazards of bridge revenue bonds, particularly those of interstate bridges and those of bridges over navigable streams, are well illustrated by the Louisville experience. The first potential source of danger is the possibility of taxa-

[55] *A Detailed Analysis of Commonwealth of Kentucky Bridge Revenue Bonds* (Harris, Forbes and Co., New York, 1931), p. 14.

tion by an adjoining state. Indiana attempted to tax the Jeffersonville end of the Louisville bridge, although the city of Louisville owns the entire bridge. As a result of this attempt, Congress was asked to pass a law exempting publicly owned interstate bridges from all state, municipal, and local taxation, as long as the bridges were free, or as long as the tolls, if any, were devoted to the expenses of the bridge, including debt service charges. In spite of expressions of doubt [56] as to whether Congress could exempt such physical property from local taxation, the proposed law [57] was passed only to be vetoed by the President. The bill was in generalized form and was so worded as to apply to every domestic interstate highway bridge that was owned and operated under the prescribed conditions.

In the course of the debate over the bill, Senator Barkley remarked: "Congress never surrenders the right to modify, amend, or even repeal an act under which a bridge is constructed across a navigable stream." [58] Both the statute of 1906 which Senator Barkley had in mind [59] and the judicial interpretations thereof support the validity of the Senator's assertion. The resulting uncertainty respecting the property of the bridge owners and even in respect of the very existence of the bridge itself may be cited as the second hazard.

The third hazard stems directly from the same 1906 statute. In that statute Congress delegated to the Secretary of War the right to control the design of any bridge built, or rebuilt,[60] the right to prescribe the tolls to be charged,[61] and the right to order the removal of the bridge.[62] In 1914 the Secretary of War, acting under the authority so conferred, ordered the Louisville Bridge Company, a private concern, to make extensive and expensive changes in its Ohio River structure, at the same time that a general rehabilitation was being

[56] For a record of the debates, see *Cong. Record* LXXXIII (May 18, 1938), 7054 ff., and LXXXIII (May 19, 1938), 7116 ff.

[57] S. 252 75th Congress, 3rd Sess. The text of the bill was printed in the *Cong. Record,* LXXXIII (May 19, 1938), 7116. There is also a movement afoot to shift the bridge to state ownership. See the *Bond Buyer,* XCVI (March 26, 1938), 9.

[58] *Ibid.,* p. 7118.

[59] 34 Stat. 84, 86; U. S. C., 1934 ed., Title 33, sec. 498.

[60] *Ibid.,* sec. 491.

[61] *Ibid.,* sec. 494.

[62] *Ibid.,* sec. 495.

undertaken. Although the ordered changes were to be made entirely at the expense of the Company, the dictate of the Secretary of War was upheld by the United States Supreme Court.[63] Again, in 1938, the Court upheld the right of the Secretary of War to order one of two competing West Virginia bridges to lower its rates 35 per cent when it appeared that the bridge in question was prospering too greatly, despite the allegedly serious effect of the lowered rates upon, and objection made by, the owners of the second bridge, which was not prospering to a like extent.[64]

This decision means that no really irrevocable covenant respecting rates or the operation of the bridge itself can be made with bondholders in the case of bridges constructed over navigable streams. While this may not prove to be a serious matter in any large number of cases, it may be very serious in the case of particular revenue bond issues.

A fourth and unusual hazard, that of excessive use of commutation tickets, came to light recently, when the Louisville bridge income declined rather sharply for a brief period. It was found, upon investigation, that monthly tickets were being used by casual travelers who were supplied with them by gas station and road house proprietors at the commutation rate, or even gratis.

Noting the general success of the Louisville Bridge, the Kentucky State Highway Commission, soon after the completion of the city bridge, began building bridges and acquiring the privately owned bridges lying along the state's highway systems, until now it has promoted some 11 different projects.[65] One of the projects involves eight bridges already constructed and nine that may be, but most of the projects consist of single bridges. As of November 1, 1938, there was a total of $11,-334,000 of these highway revenue bonds outstanding.[66]

The financing for each project is handled separately from that of every other project, and the bonds in every instance

[63] Louisville Bridge Company *v.* United States, 242 U. S. 409 (1917).

[64] Woodring *v.* Clarksburg-Columbus Short Route Bridge Co., 302 U. S. 658 (1938).

[65] Project numbers run from 1 to 15, with 4 through 7 missing. Projects 14 and 15 are in process of being established. Eight hundred and eighty-five thousand dollars of 2¾ per cent bonds for Project No. 14 were sold in January, 1938, on a 2.60 basis, according to reports. *Com. and Fin. Chron.*, CXLVI (Jan. 22, 1938), 626.

[66] *Moody's Manual, Governments and Municipals: 1939,* p. 536.

are payable out of the gross revenues of the respective projects only. In all cases the expense of operating, maintaining, repairing, and insuring the bridges is paid for out of other state funds, and the state covenants with the bondholders that it will supply sufficient funds to cover all such expenses as long as there shall be any bonds outstanding.

The bonds are all sinking fund debenture bonds, and up to and including Project No. 13, at least, indentures were always used. This contrasts with the New York experience, where indentures were never used. All of the outstanding issues were quoted at a premium in mid-1937,[67] and all seven "rated" issues carried a rating of A by a leading service.

Refunding operations have brought the interest rates down from the original 4¼ per cent of 1930 to the current 3 per cent and 3½ per cent. In the case of Project No. 12, the Covington-Cincinnati Interstate Bridge, bonds carrying a 2¾ per cent coupon were sold to investors in 1937 at 102½. Ferry competition, a very serious factor in the cases of some of our largest bridge promotions, has been eliminated.[68]

Because of such advantages as state contributions to the original cost of construction, the state's covenant to bear all operating costs, and the lack of any Federal tax burden, the sponsors of the first three bond issues computed, in 1931,[69] that the annual charges to be met out of gross earnings under the state revenue bond plan would be only about half what they would be under private ownership. This is, of course, no test of the advantages of public ownership, as it stands, but it does indicate the favorable position of the investors in the revenue bonds.

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[67] *Kentucky Bridge Revenue Bonds* (Bankers Bond Co., Louisville, Ky., 1937), p. 12.

[68] *Kentucky Bridge Revenue Bonds* (J. J. B. Hilliard and Son, Louisville, Ky., 1937), p. 2. How serious competition can be should be evident from the experience of the Lake Ponchartrain, Louisiana, Bridge. Built with private funds in 1928 and with no guarantee against competition, the state, shortly after completion of the privately owned bridge, built a bridge of its own nearby. The Ponchartrain company failed. A receiver was appointed after the bridge had been opened for *less* than a year. The Detroit International Bridge Company, builder of the Ambassador Bridge between Detroit, Michigan, and Windsor, Ontario, is another instance. There, competition from a newly constructed tunnel, combined with the effect of a 50 per cent reduction in ferry charges, forced the bridge into the courts. On the other hand, the George Washington Bridge and Holland Tunnel prosper despite competition from ferries charging just half the bridge and tunnel rates.

[69] *A Detailed Analysis*, etc., p. 6.

Recent parallels to Kentucky practice. A recent municipal revenue bridge bond issue drawn on lines similar to the Louisville issue is that of the city of Davenport, Iowa, four per cent bridge revenue bond issue of 1934, due February 1, 1954. The newly organized Ohio Bridge Commission likewise parallels in many respects the Kentucky State Highway Commission.[70]

California Toll Bridge Authority. The second largest issuer of bridge revenue bonds is the California Toll Bridge Authority, a public body first organized in 1929.[71] It operates the San Francisco-Oakland Bay Bridge, one of the two huge additions to the transportation facilities of the Bay region. The Golden Gate Bridge, the other recent development, is supported if, and to the extent, necessary, by ad valorem taxes upon all of the taxable property within the Golden Gate Bridge Highway District. It is not, therefore, a true illustration of revenue bond use.

The Bridge Authority is composed of a board of five state officers: the governor, lieutenant governor, the state's director of the department of public works, the director of the department of finance, and the chairman of the California Highway Commission.

The noteworthy statutory provisions authorizing the Authority's activities are the provisions that (1) the property used by the Authority shall continue to be subject to taxation, and that the state shall pay the amounts due,[72] (2) political subdivisions "may" contribute to the Authority's construction, acquisition, and maintenance expenses, even to the extent of selling general obligation bonds therefor[73] (3) the Authority "may" repay these contributions,[74] (4) the tolls may be segregated for each bridge or pooled, at the discretion of the Authority,[75] (5) operation and maintenance expense shall be junior to interest and principal payments,[76] and (6) the state shall contribute $50,000 to provide a permanent revolving fund for preliminary expenses.[77]

[70] It is not surprising to find the same municipal bond attorneys and the same investment bankers associated in these ground-breaking ventures.

[71] Calif. Stat. (1929), c. 763. Amended by Stat. (1931), c. 401, Stat. (1933), c. 10, and Stat. (1937), c. 486.

[72] Stat. (1929), c. 763, as amended, sec. 9

[73] *Ibid.*, sec. 11.

[74] *Ibid.*

[75] *Ibid.*, sec. 13.

[76] *Ibid.*, sec. 7 and sec. 13.

[77] *Ibid.*, sec. 22.

The bridge, begun in 1932, was opened to traffic November 12, 1936. Traffic at first was adequate, but it slumped sharply in September, 1937, when the Southern Pacific Golden Gate Ferries, Incorporated, operators of the ferries in the Bay, lowered their charges to less than half the amount charged prior to the construction of the bridge. The ferry charge for a one-way ticket is now only 60 per cent of the bridge toll and for a round trip ticket is the same as the bridge one way toll.

Currently, the Authority's bridge is still securing enough revenue to service its debt, but retirement of the debt would be delayed if the present ferry competition continues. The low charges by the ferries are supposed to be a "forcing move" to persuade the Authority to purchase them at a price of $3,750,000.[78]

As of May 1, 1938, the RFC had authorized loans to the California Toll Bridge Authority in the amount of $73,000,000. Most, if not all of these, were 4¾ per cent bonds due in 1968. In addition, there was a local 5 per cent loan of $455,000 owed to San Francisco banks. It has been reported that the $73,000,000 of RFC loans would be refinanced into $33,000,000 of serial 4 per cent bonds due 1939 through 1964, and $40,000,000 of term 4¼ per cent bonds to mature in 1975.[79]

Alabama State Bridge Corporation. The Alabama State Bridge Corporation is notable for the fact that it was the originator of the issue which resulted in the only known authority default.[80]

The bonds were the Alabama State Bridge Corporation 6 per cent bonds of 1928, issued in the amount of $5,000,000 and due serially to 1940. This authority was created as an agency of the state in 1927 for the sole purpose of constructing and operating 15 state highway bridges. Tolls were to be collected, and, as usual, they were to be collected in such amounts as would be sufficient to pay the operating expenses, the interest, and the maturities of principal. In addition, the interest could be paid, if necessary, out of the state funds.

The bridges were not located on important main highways, and the state found it necessary to make transfers in aid of

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78 *The New York Times,* Dec. 5, 1937, sec. 4, p. 6.

79 *Financial Reporter,* IV (April 27, 1938), 261.

80 This Corporation was so closely affiliated with the state that it is hardly correct to call it an authority, at all If not so classified, then there has not been a single authority default.

the bonds from the beginning. When local opposition developed to the charging of tolls—even the insufficient tolls—the state, through its Highway Commission, leased the bridges from the Corporation, contracting to pay that body not in excess of $300,000 annually towards servicing of the bonds.[81] At the same time that the highway commission took control of the bridges, it abolished the tolls and offered to pay interest to the Corporation's bondholders at the rate of 4 per cent. It also proposed to make serial principal payments on the basis of a 12-year time extension over the original plan.

As of September 30, 1938, the commission was reported to be paying $137,500 semi-annually to the Corporation. This was believed to be enough to pay the interest at the rate of 4 per cent on the extended bonds and to retire all of the outstanding obligations by 1952, the agreed date. Interest, at the original rate of 6 per cent, was paid through June 1, 1936, on all deposited bonds, and was similarly provided for the undeposited bonds.

It has been said that the bondholders received a better bond, and that a 4 per cent bond secured by the lease is better than the 6 per cent bond as originally secured. This is possible, but the fact remains that covenants respecting the rates that would be charged,[82] and the implications as to the transfers that would be made if help should be needed, were not adhered to.

The most serious fault to be found in the original arrangements was the poor location of the bridges. This point has not been previously emphasized, but it is so important a determinant of a sound revenue bond issue that almost immediately after this Alabama Bridge Corporation default, and in spite of it, the Alabama Bridge Commission, another agency similar in nature to the Alabama State Bridge Corporation, was able to sell a $950,000 issue of 4½ per cent bridge revenue bonds payable solely out of the net revenues from tolls, after allowing for operating expenses.[83] The explanation lies in the loca-

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[81] Some of the facts and most of the figures that relate to this default and readjustment are taken from the recent *Moody Manuals, Governments and Municipals.*

[82] See Alabama Gen. Acts (1927), p. 280.

[83] Poor location, in some instances, may be a temporary matter, and the result of a lack of adequate traffic arteries. This was notably true in the cases of the Port Authority's Outerbridge Crossing (*The New York Times,*

tion of the latter bridge on important Federal highways. It constitutes parts of U. S. Highways 43 and 72 and lies not in rural areas as the other Alabama bridges did, but serves to connect the towns of Florence and Sheffield, Alabama. It will be the only public vehicular bridge across the Tennessee River for a distance of 100 miles. Since the bridge replaces a structure that has actually enjoyed a traffic of about 1,500,000 vehicles a year,[84] it will, in a sense, be a seasoned venture rather than an experiment, and this despite the fact that it is a new bridge.

Bridge authority bond summary. There are many other bridge authority revenue bond projects, such as the Philadelphia-Camden, Easton-Phillipsburg, and Triborough bridges, but the most important factors respecting bridge revenue bonds are illustrated by the already described instances. Of course, to a degree greater than is true for any other kind of revenue bond project, each individual bridge issue varies from every other issue, and to that extent every issue reveals new problems. The explanation lies mainly in the fact that the matter of bridge location is not standardized in respect to the surrounding conditions to the extent that standardization of pertinent factors is found in connection with water, gas, and electric light projects.

Toll bridges can be more profitable investments per dollar invested, and also bigger failures, than any of the other facilities financed by the use of revenue bonds; consequently, such bonds should be bought with caution. Some of the estimates of anticipated traffic have been, and are, fantastic. In a series of 14 estimates made by consulting engineering firms between 1929 and 1932, the actual traffic (or gross revenues) fell short of the predicted figures by more than 50 per cent in one or more years in seven of the cases, and by more than 30 per cent in 11 of the cases. In three instances it was more than 69 per cent below expectations. The Arthur Kill bridges were expected to attract more than 4,000,000 vehicles in 1933; actually they carried less than 1,000,000.[85] In only one case

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April 5, 1930, p 39), Marine Parkway (*The New York Times,* Jan. 19, 1938, p. 25), and the Lincoln Tunnel (*The New York Times,* May 18, 1938, p. 2).

[84] Engineer's report, as quoted in the offering circular dated December 1937

[85] *The New York Times,* editorial, March 20, 1934, p. 22.

was the error persistently an underestimate. Estimates made within the past two years have, likewise, been faulty. The truth is that estimating in advance of the opening of a bridge is subject to wide error. Even after the bridge is opened, the volume of traffic can change sharply. Traffic over the Lake Champlain Crown Point bridge declined from 74,218 vehicles in 1931 to 49,660 in 1933, a loss of one-third of the business in only two years.

An interesting and novel type of revenue bond financing that is reminiscent of the origin of revenue bonds in England is that which is being issued by the newly created Pennsylvania Turnpike Commission. This body, organized under Pennsylvania Laws (1937), No. 211, is authorized to construct and operate a toll highway between the vicinities of Harrisburg and Pittsburgh, Pennsylvania. The highway will be about 162 miles long and is to be built at a much lower grade than any surface road that is presently located in the region. This result is made possible by the use of tunnels that were constructed for the Vanderbilt railroad interests in the 1880's but were never used. The present plan calls for a PWA grant of about $26,000,000 and an RFC loan of not more than $35,000,000. The RFC will take up the bonds, upon requisition by the turnpike commission, and will then sell them to private bankers, who will, in turn, offer the bonds to the public. The bonds will in no sense be obligations of the state, nor will there be any mortgage on the right of way. They will be secured solely by the revenues of the project. Of these, tolls will naturally be the most important part.

Water Authorities. It has already been shown that there are water districts in the United States which have no power of taxation, but which may borrow on the security of their service charges only.[86] It was also stated that such districts have not been numerous in this country. A number of water districts have recently been formed in the state of Texas, and that state is now the most important user of this type of authority. The Guadalupe River Authority, Guadalupe-Blanco River Authority, Brazos River Conservation and Reclamation District, Upper Colorado River Authority, Central Colorado River Authority, and the Lower Colorado River

[86] See p. 227.

Authority are a few of the many authorities to be found in that state.[87]

By way of illustration the Lower Colorado River Authority may be examined.[88] This authority is made up of eight Texas counties. Like most of the Texas authorities, but unlike the Maine examples, the Lower Colorado Authority is a multiple-purpose project. It has for its purpose not only the storage of water (in this case primarily for irrigation purposes), but also the generation of electric energy and the promotion of forests. The Authority is managed by a board of nine members. Compensation of the members, at the rate of $10 per day and expenses, may not exceed 150 days pay in any one year. The board selects officers and employees to manage the project and determines their salaries and wages.

On the financial side, the board is ordered to establish rates for the sale of water and power that will be sufficient to cover operating and financing costs. It is not contemplated that the project will be operated at a profit, but it is the intention to make it self-sustaining. The board has no power of taxation, nor may it mortgage the Authority's property. The Authority is empowered to borrow up to $20,000,000 on bonds to be payable solely out of the revenues, and it had already sold its bonds to the PWA in the amount of $15,000,000, as of July 16, 1938.[89] The project is still so largely in the development stage that no appraisal of its ultimate likelihood of success is feasible.

A second water authority is the Great Basin Authority Board established by the Great Salt Lake Diking Project Act of 1935 in Utah.[90] The primary purpose, in this case, was to construct dikes that would enable a fresh water lake to be impounded. Any borrowed money may be secured by a pledge of tolls from roads built as an incident to the whole development, or from royalties to be received from any min-

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[87] References to the authorizing statutes can be found in E H. Foley, Jr., "Revenue Financing of Public Enterprises," 35 *Mich. Law Rev.* 1, 36 (November 1936) The statutes themselves are collected in Vernon's Civil Statutes of the State of Texas, Annotated, Title 128, c. 8.

[88] See Texas Acts (4th Called Sess. 1934), p. 19, as amended by Acts (1935), p. 282, and by Acts (1st Called Sess. 1935), p. 1604, and by Acts (1937), S. B. 497.

[89] *Com. and Fin. Chron.*, CXLVII (July 16, 1938), 465

[90] Laws (1935), c. 136

quickly distributed. The remaining bonds were placed privately.[95]

The Board's main source of income is expected to be revenues received under contract from large private utilities which will make use of the potential water power for generating purposes.[96] The act authorizing the Board has been upheld by the state supreme court.[97]

Electric Power Authorities. Electric and power authorities are of three kinds: rural electrification authorities, power districts, and improvement authorities. Some states, mostly in the Middle West and South, have enacted enabling legislation permitting all three types to function.

Most of the electric authorities are the indirect result of the Executive Order,[98] issued by President Roosevelt on May 11, 1935, creating the Rural Electrification Administration, and of the ensuing Federal Rural Electrification Act of 1936.[99] In conjunction with these Federal activities, seven states[100] (Alabama, Mississippi, Montana, New Mexico, South Carolina, South Dakota, and Tennessee) created Rural Electrification Authorities which were authorized to promote rural electrification along comprehensive lines. Most of the acts are similar, as might be expected, since they were mainly drawn in Washington.[101]

Because the securities of the authorities have not come into the open market, but insofar as there have been any, they have gone to the REA in Washington, the acts will not be extensively studied. The New Mexico Act[102] may be taken as representative of the type. The New Mexico Authority has no taxing power and may only sell bonds secured by revenues. Like the Texas water authorities, the electrification Authority is to be operated not for profit but merely in such a way as to

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95 *New York Herald Tribune,* June 8, 1938, p. 30.
96 *The New York Times,* April 10, 1938, p. 6.
97 *Ibid*
98 No. 7037.
99 49 Stat. 1363. The Federal phases of these authorities have already been touched on in Chapter VIII.
100 See Jacob Geffs and William McGuffey Hepburn: "Public Authorities and Cooperatives to Promote the Use of Electricity," 25 *Georgetown Law Jour.* 827, 833 (May 1937). The various states' acts are exhaustively compared in this article. I have relied heavily on this article in this section.
101 *Ibid.*, p. 830.
102 Laws (1935), c. 100.

cover at least the operating and financing charges. While it operates on state-wide lines, it may secure its obligations by a pledge of revenues from single projects if it so elects. There is no permission granted to mortgage the property, nor is there any mention of a right to have a receiver appointed in case of default. As in many other types of authorities, it is provided that, should the Authority cease to exist, all of its assets, after the outstanding obligations have been satisfied, shall pass to the state.

Two states, Alabama and South Dakota, have enacted Improvement Authority Laws. These acts enable a municipality to conduct an enterprise through a city-created authority. The permitted utilities or services which the municipality may furnish are: "water, sewerage, telephone, gas or electric heat, light or power services, commodities or facilities."[103] As usual, it is expressly stated that the bonds shall not be an obligation of the state or municipality, nor may any bondholder compel the levy of a tax.

Eight states (Alabama, Mississippi, Nebraska, Nevada, South Dakota, Tennessee, Wisconsin, and Wyoming) have enacted Power District Laws. The Wisconsin districts are the only ones that have the taxing power, and in general the power districts are very similar to authorities. However, they are entitled municipal corporations and suffer some of the disabilities inherent in such state subdivisions, whereas authorities are declared to be public corporations and consequently have the somewhat broader powers attaching to the larger state bodies. The districts are authorized to issue bonds secured solely by a pledge of revenues or by a pledge of revenues plus a mortgage. The districts may include more than one municipality, and two districts may consolidate. Their obligations would be revenue bonds, except in Wisconsin.

The nearest approach to an actual market revenue bond issue, in all of these electric power authorities and districts, is the recent proposal of three Nebraska power districts to finance the purchase of 10 of the 13 largest Nebraska power companies by the issuance and sale to private banking interests of $20,865,000 serial revenue 4 per cent debentures. Ultimately, an additional $70,000,000 in revenue bonds might be

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[103] Alabama Gen. Acts (1935), No. 40, sec 2 (e) and South Dakota Laws (1935), c. 73, sec. 3 (e). Also, see p. 225.

issued to acquire the other three large companies. The aim is to form eventually a state-wide system, and part of the $20,865,000 issue would be used to construct facilities needed to integrate the system.[104] The issue is still in the tentative stage and requires the approval of the Secretary of the Interior. This consent is necessary because the districts were the beneficiaries of PWA loans that were made with the understanding that the districts would not engage in further borrowing unless they first secured PWA permission.

Districts such as these serve to overcome the two biggest disadvantages of municipally owned plants—their small size and their inability to make use of the advantages of integration on a scale comparable with that of the large regional private companies. They hold great possibilities, both for public ownership and for the increased use of revenue bonds.

Housing Authorities. A type of authority even more frequently represented in the various state statutes than the rural electrification authorities, but less active to date in the borrowing field, is that dealing with housing.[105] These authorities are usually empowered to issue revenue bonds only. These bonds may or may not be secured additionally by the grant of a mortgage, and something new, they may be issued without a pledge of the credit of the authority, as such.[106] The bonds frequently are made legal, whether secured by a mortgage or not, for investment by such institutions as savings banks and insurance companies, provided that the supporting loans do not exceed two-thirds of the value of the property against which they are issued.[107] However, there is at least one state statute that does not contain this provision.[108]

As a specific example of a housing authority law, the New

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[104] *New York World Telegram,* May 14, 1938, p. 30.

[105] See Foley, "Revenue Financing," etc., Appendix B, for statutory citations by states. On legal phases of revenue bonds for housing, see E. H. Foley, Jr., "Low-Rent Housing and State Financing," 85 *U. of Pa. Law Rev.* 239 ff. (January 1937), and "Legal Aspects of Low-Rent Housing in New York," 6 *Fordham Law Rev.* 1 ff. (January 1937).

[106] Rhode Island Laws (1935), c. 2255, sec 13.

[107] *Ibid.,* sec. 24 The text of the section must have been corrupted along the way, for it actually reads: "Bonds . . . when they are secured . . . on, property the value of which does not exceed 66⅔ per centum of the aggregate principal amount of such bonds outstanding, are hereby declared to be [legal for investment]. . . ." Also Louisiana Acts (1936), No. 275, sec. 23 and Tennessee Acts (1935), c. 20, sec. 25.

[108] Alabama Acts (1935), No. 56.

York enabling act providing for the establishment of local housing Authorities may be examined.[109] The legislation is largely permissive in character. Thus the law provides that an Authority, to be composed of five members, may be established by resolution of the community's legislative body. The community may make contribution of funds for the administrative expenses of the Authority and the Authority may be exempted from any necessity of reimbursing the municipality. The Authority is also permitted to exercise the right of eminent domain.

The Authority's financial powers include the right to raise funds by the sale of its bonds at either public or private sale, and at such prices as the Authority may determine. Unless related to a Federal project, approval of the bonds as to the amount and terms must be secured from the municipal board of estimate and apportionment, or from the legislative body, if there is no separate board. The Authority may pledge all or any part of its rents, fees, or revenues, and may give a mortgage on all or any part of its property. On the other hand, it may covenant, if it wishes, not to pledge any of such rents, fees, or revenues, or to mortgage any of its property. The Authority, at its election, may arrange to create such special funds for various purposes as seem desirable, and it may arrange for loans and grants in connection with the Federal government's housing program.

More positively, the statute provides that the bonds of such an authority shall be eligible investments for savings banks and other similar institutions if they do not represent more than 66⅔ per cent of the value of the property, or if the bonds are "issued in connection with a project aided or financed in whole or in part by the Federal Government pursuant to the provisions of an act of the Congress providing for capital grants for low cost housing, or for the making of loans and for the payment of annual contributions for such purpose under a contract guaranteeing the payment of such annual contributions by the Federal Government to the authority for a fixed period of years." [110] The Authority and its property are declared to be exempt from all state and municipal taxes, as

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[109] Laws (1934), c. 4, as amended by Laws (1935), c. 310, and by Laws (1938), c. 218, and by Laws (1938), c. 395, and by Laws (1938), c. 461.

[110] Laws (1934), c. 4, as amended, sec. 72 (5).

are also the Authority's bonds. A contribution by the Authority in lieu of taxes was mandatory under the original law, but now is merely permissive. The power to pledge the credit of either the state or sponsoring city is specifically denied to the Authority, while the remedies that are potentially available to the bondholders are listed in the act as foreclosure, mandamus, injunction, suit for possession, receivership, and request for an accounting.

Very few bonds of municipal housing authorities have as yet been sold in the open market. Unless accompanied by a subsidy, new housing projects admittedly do not provide conservative security for revenue bond loans. Neither here nor abroad has housing been found to be truly self-supporting.[111] Where subsidies are given they come mostly from the Federal government, and that factor, coupled with the government's willingness to lend 90 per cent of the cost of the project, has resulted in most of the authorities' bonds going to the Federal government, as represented by the United States Housing Authority.[112]

One of the reasons calling for subsidies in the municipal housing industry is the absence of that municipal monopoly which is customary in the utility field. The existence of millions of old housing units, representing *sunk* investments to owners and speculators, will effectively prevent municipal authorities from covenanting to "maintain and collect such rates as will be sufficient to pay operating, maintenance, and debt service charges." Another reason why subsidies are necessary in the field of housing is the greater drain on the pocketbook represented by the monthly payments for housing facilities, compared with the relatively small burden of the water, electric, or gas bills. The latter payments are more likely to be made in good times and bad than are the former.

Other Authorities. In some states, educational institutions are authorized to borrow money on their own responsibility or through state boards of trustees. These are true

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[111] See *Report of the Joint Legislative Committee on State Fiscal Policies* [Leg. Doc. (1938), No. 41], Albany, N. Y., 1937, p. 119. This report is frequently referred to as the Moffat Committee Report. For European experience see *Urban Housing,* Fed. Emerg. Adm. of Public Works (Wash., D. C., 1936), Appendix A, esp. p. 54.

[112] For a discussion of housing revenue bonds as used in connection with government aid, see Chapter VIII, p. 216.

revenue bonds when payable solely out of the revenues of the enterprise that is made possible by the borrowing, but most of the state educational loans also pledge tuition moneys and other fees, in addition to the direct returns from the financed dormitory or other structure. For that reason they will not be further dealt with in this work.

Two unusual authorities that have the right to use revenue bonds are the State Mineral Resources Board of Colorado,[113] and the American Museum of Natural History Planetarium Authority.[114] The former is authorized to issue "Mining Development Revenue Bonds" for the purpose of paying the cost of "works" useful in developing and utilizing the mineral resources of the state. Such "works" include, among other things, mills, plants, equipment, tunnels, easements, and franchises. The bonds are to be payable solely out of a special fund to which may be pledged all or any part of the incoming "profit and revenue" of such works or project.[115]

The Planetarium Authority is authorized to issue its negotiable bonds and may pledge the revenues of the planetarium to secure the obligations. The main source of income is the admission fees charged. This Authority sold $650,000 in revenue bonds to the RFC in 1933.

Summary

The Authority device has grown very rapidly in recent years.[116] But its growth legislatively has been even more rapid than its growth politically or financially. Much of the legislation, such as the housing authority legislation, for instance, is permissive in character and will only come into use if local interests act under the enabling legislation. Educational authorities are largely limited to state institutions of higher learning and are often partially supported out of funds other than those derivable from the projects financed by the authority; water districts that do not exercise the tax power

113 Laws (1937), c. 217.

114 New York Laws (1933), c. 214, as amended by Laws (1933), c. 816 and c. 817.

115 Colorado Laws (1937), c. 217, sec. 7A.

116 Thirty-three New York Authorities alone are named in the Moffat Committee report [N Y. Legislative Document (1938) No. 41], of which all but two were established within the past six years.

are increasing very slowly in number, except in the state of Texas, and the New Hampshire state-wide water resources board is an innovation in this field. There is also a miscellaneous group of authorities used, as a rule, only in a single state for some unusual type of enterprise, *i.e.*, a planetarium, hospital, or canal.

By far the greatest actual use of authorities has been in connection with bridges and tunnels, with the two uses closer together in dollar volume than in number of projects. Tunnels are comparatively rare but they are expensive projects where undertaken.

The greatest possibilities of growth lie with the electric power districts and authorities, since the decline of the number of municipal plants is in large measure the result of inability of an isolated plant to duplicate the efficiency shown by plants that are parts of a system. The arguments for and against statutory revenue bonds cannot be easily disassociated from the arguments for and against the peculiar types of enterprises with which they are connected. The arguments do not concern the substance of authority revenue bonds as such, for that is conventional enough. The methods used in arranging the loans, including the provisions of the resolutions or indentures, the marketing methods, and the remedies specified, can be found substantially duplicated in existing municipal loans. In fact, the early English revenue bonds were the obligations of authorities, and the local use of the bonds by a municipality in the United States is but a simulation of the authority device. The municipalities, in making use of revenue bonds, impose upon themselves authority-like limitations, especially concerning the right of the bonds to any support from taxation.

From the standpoint of the investor. The important factors in bridge and tunnel bonds have been touched on at various places in the preceding pages. They include, in brief, matters of engineering, finance, and law. The first would include both the character of the structure and its location relative to existing or potential traffic. Finance includes the annual income and annual expense as such, and more fundamentally, all those factors which go to make each of these what it is, and what it will be in the future. Law would be con-

cerned with an analysis of the promises that are made to the bondholders by the projects' sponsors, the likelihood that the debtors can be compelled to fulfill their pledges, and the rights of the investors if defaults should occur.

Perhaps the most penetrating general analysis that has been made of statutory authorities and of their obligations is that made by the New York legislative group known as the Moffat Committee.[117]

While admitting that the use of an authority has advantages—it does not result in the incurring of debt by a state or by a municipal corporation busied with governmental duties, and it does make necessary the operation of the enterprise along strictly business lines, since an authority cannot hide deficits with tax proceeds—the Committee felt that there were certain very real dangers connected with the device.[118] They are, according to the Committee, (1) the independence of the authority, since it is usually an appointive organization, and its members not removable except for cause; (2) the danger that, although the state supposedly is not liable for the obligations of authorities, it may, in fact, feel it necessary to, and may, contribute to the support of authorities which would otherwise fail;[119] and (3) the danger that the state's funds may be invested in unsound authority bonds.

The first Committee argument would appear to have two sides. There may be the same advantage in an independent authority as in an independent judiciary, the members of which are, likewise, not removable "except for cause." Furthermore, the American type of organization in its autonomous character is faithful to its English counterpart, which has been looked upon as successful. The second argument

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[117] *Report of the Joint Legislative Committee on New York State Fiscal Policies* [N. Y. Legislative Document (1938) No. 41], chap 7.

[118] For another critical account of authorities see Horace A. Davis, "Borrowing Machines," *Nat. Mun. Rev*, XXIV (June 1935), 328.

[119] This possibility has already been referred to in connection with the discussion of the Port of New York Authority and the Marine Parkway Authority. The Moffat Committee cited the additional examples of the Saratoga Springs Authority, which, it states, was subsidized to the extent of $325,000 in the 1938 budget; the contribution by the state to the Industrial Exhibit Authority of 25 per cent of the gross receipts collected at the State Fair Grounds; aid extended to the Niagara Frontier Commission; and contemplated aid to the Jones Beach State Parkway Authority and to the Bethpage Park Authority.

would be more weighty if the assumption of the burden by the state could be forced. If the help is *volunteered* by the legislature, as it was in the Williamsburg Savings Bank case,[120] where the state came to the help of the Canaseraga River Improvement District, the potential harm would not appear to be great. The third danger, that of investment in unsound authority bonds, seems not so much an argument against the existence of authorities as it is an argument respecting the proper handling of state funds, another matter. Also the second and third arguments cannot be true at the same time. If the state supports the authority bonds, the state funds that invest in such bonds will not suffer loss on their investments; if the state does not support the authority bonds, the second argument, that the state will lose through the making of contributions, will not be valid. Nevertheless, it may be true that the state would not support the bonds, in some instances, unless state funds were invested in the authority bonds. To that extent there may be added burden for the state, but even then it would not exceed the burden which would accompany use of general obligation bonds.

The Committee concluded the brief chapter with the following recommendation:

1. That the State be very hesitant about creating any new authorities hereafter.
2. That the statutes authorizing the creation of authorities which have been enacted, but under which no obligations have been incurred, be repealed. These include among others the Rockland-Westchester Hudson River Crossing Authority, and the Albany Light, Heat and Power Authority.
3. That in any new authority that is hereafter created especial attention be focused on the personnel of the board of directors and that, in no event, a single official, and preferably not an existing agency, be constituted ex officio an authority.
4. That all subterfuge now utilized in subsidizing authorities be stopped and that, where it is decided that the State will assist an authority financially, such assistance be openly and frankly given.
5. That any authorities hereafter created be created by the State and not by a locality, and that general laws authorizing localities to establish authorities be repealed, validating, however, these authorities heretofore created by local action, if desired.
6. That every authority be required to submit annually to the Governor and the Legislature a detailed annual report.
7. That, for the convenience of the public, the various statutes re-

[120] Williamsburg Savings Bank *v.* State, 243 N. Y. 231, 153 N. E. 58 (1926).

lating to authorities created by the State be compiled in one chapter of the consolidated laws.[121]

The authority device has its uses, especially in interstate affairs, but it is also a serviceable method in cases where ordinary revenue bonds are not permissible or where self-supporting enterprises are not exempted from taxation. Any attempt to force the abandonment of the authority would seem to be an extreme and unwarranted move at the present time.

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[121] N. Y Legislative Document (1938) No. 41, p. 86. New York Constitutional Amendments adopted at the 1938 fall elections accord with recommendations 1 and 4, above.

CHAPTER X

An Appraisal

IN THIS last chapter answers will be attempted to such questions as the following: Is the revenue bond device necessary? Is it desirable? What are the possible alternatives? What are the advantages and disadvantages of the revenue bond device from the standpoint of the investor? From the standpoint of the user of the facilities? From the standpoint of the taxpayer?

Necessity

According to the latest tabulation available,[1] every state in 1937 had either constitutional or statutory, or both constitutional and statutory, limitations upon the amount of debt that could be created by its subdivisions. Thirty of the states had constitutional limitations, 18 had statutory restrictions only, and 20 had both constitutional and statutory restrictions In addition, the constitutions of 16 of the states stipulate that a tax must be levied at the time that a debt is incurred.[2]

However, a mere listing of the states and their respective debt limitation provisions would not give a true indication of the need for revenue bond enabling acts. For one thing, a constitutional limitation, if other things were equal, would be a more severe restriction than a statutory limitation. Again, some of the percentage limitations found in the constitutions or statutes might be so high as not to constitute a handicap at all. Furthermore, the manner of making assessments of property varies among the states. If one state limits

[1] *Congressional Record,* LXXXI (June 16, 1937) 5873 ff., adapted from the *Municipal Year Book: 1936,* p. 319 ff.

[2] 4 *Fordham Law Rev.* 28, note 72 (January 1935).

the permissible debt of a municipality to 5 per cent and then orders assessment at full value, it makes the possible debt identical with that in another state where the debt limit is set at 10 per cent and the assessors are instructed to value property at 50 per cent of the true value. Nor is the legal percentage of true value that is supposed to be used in the appraising the most significant figure. The actual percentage which the assessors use may be, and often is, at variance with the known statutory requirement. This practice, too, will alter the impact of the debt limit percentages.

In addition to assessment practice, close attention needs to be given to the political units and to the utilities or services which are exempted from the limitations. If the exemptions are numerous enough, the strictest percentage terms will be harmless. Likewise, the possibility that special assessment obligations may be used, or that "districts," coterminous with the municipalities and having an additional taxing power, may be formed, is of great importance in determining the necessity and desirability of permitting the continued use of revenue bonds.

Other important factors are the percentage of vote required to override the limitation, where such action is permissible, and the attitude of the state's courts towards attempts of political bodies to finance their undertakings without resort to general obligation securities. Communities located in a state having a rather low debt-limit figure, but one which requires only a majority vote to override the limitation, may actually find themselves in a position to finance their needs more easily than communities located in states having a somewhat higher debt-limit figure but a limit that can only be overcome by a heavy preponderance of the vote, say two-thirds, as in California. And where the courts permit quasi-evasive methods of financing, such as installment purchase contracts and leases, the necessity for a revenue bond law may not be apparent, however severe the debt limitation provisions may be.

If one were to make out the strongest possible case against the necessity of having revenue bond laws, it might be said, and truthfully, that of the 48 states, 18 have no constitutional debt limits (supposedly the only restrictions very difficult to change) that are applicable to subdivisions, and that of the remaining 30, 26 grant exemptions to certain subdivisions or

for certain types of utility or service debt[3] (see Table 19). But since statutory restrictions are just as binding upon a municipality as long as they are in force as are constitutional limitations, and since they may be, in practice, as hard, or even harder to change than are the constitutional limits, there

TABLE 19

EXEMPTIONS OF UTILITIES AND SERVICES IN THE THIRTY STATES HAVING CONSTITUTIONAL DEBT LIMITATIONS †

Legislative status	*Number of states*
Granting no exemptions and having no revenue bond law	1 *
Granting certain exemptions but having no revenue bond law	1 ‡
Granting no exemptions but having a revenue bond law	3 §
Granting certain exemptions and having a revenue bond law	25 ††

Source: Compiled from *State and Municipal Compendium* and statutes.

† Of the thirty states, five have constitutional provisions permitting the issuance of revenue bonds. They are: Louisiana, Pennsylvania, Utah, Virginia, and Wisconsin. All five are included in the fourth group in the table.

* Maine.

‡ Oklahoma.

§ Georgia, Indiana, Texas.

†† Alabama, Arizona, Colorado, Florida, Illinois, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Montana, Nebraska, New Mexico, New York, North Dakota, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

may be a real need for revenue bond legislation in those states having statutory but no constitutional restrictions. Furthermore, the statement that 26 out of the 30 states with constitutional limitations allow additional debt over and beyond the standard limit, for certain types of utilities and for certain political units, is not a very enlightening statement, standing alone. One must know what utilities and what political subdivisions are excepted, and in what states they are located. Thus if only sewer is excepted, as in Kansas, or if only those cities of more than 75,000 population, as in Missouri, are given certain preferences, the exemptions may not lessen by much the need for revenue bonds.

Probably no simple formula will show whether revenue bond legislation is necessary, but the fact that the PWA found itself unable to lend to the political subdivisions of many of the states and hurriedly drew up legislation increasing by more than a score the number of states permitting the use of revenue

[3] The nature and extent of the individual state exemptions are summarized in the *State and Municipal Compendium,* Wm. B. Dana Co., New York, January and July issues of each year. The state exemptions vary as to (1) the political units, (2) the utilities, and (3) the amounts of debt that are exempted.

bonds is strong evidence that the existing exemptions still left the political units in a position where they were frequently unable to exercise any substantial borrowing power.

Desirability

While it may be true, then, that resort to revenue bonds or some similar device is necessary, if the communities in the many states that have legal restrictions on the incurring of debt are to borrow money and promote revenue-producing projects, it does not necessarily follow, from that fact, that it is desirable that the political bodies should be able to circumvent the established debt barriers. Some students of the question would say that the restrictions were inserted for a sound purpose, and that that purpose ought not to be defeated by resort to what are, in effect, evasive methods. But it has been pointed out that the original purpose of the restrictions was to safeguard the taxpayer,[4] and that that purpose is not defeated by the use of an obligation not payable out of taxation. In fact, if some such device is not used, the restrictions accomplish an object that was *not* intended; they prevent the purchase of revenue-producing assets by the community—assets that may even be used in aid of the taxpayer, as electric light plants are used in Jacksonville, Florida, and in the so-called "taxless" towns.

It is admitted, however, that the use of revenue bonds may inadvertently result in a burden upon the taxpayers in certain instances. This may be true, for example, in cases where the revenue bonds constitute a first claim upon a fund which proves inadequate to service both the bonds and the operating expenses, or where the taxpayers voluntarily assume a burden in order to maintain the payments on revenue bonds which would otherwise default. For these reasons, it is not clear that revenue bonds are always an unmixed blessing. Each person's conclusions as to the desirability of revenue bonds will be affected somewhat by his attitude towards increased governmental functioning and by his hopes or fears respecting the future history of the presently augmented supply of revenue bonds.

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[4] Pages 51–52. See also Bank for Savings *v.* Grace, 102 N. Y. 313, 318, 7 N. E. 162, 163 (1886).

Up to this point the assumption has been that the main argument favoring the use of revenue bonds has been the necessity and desirability of avoiding constitutional and statutory restrictions, but there are reasons leading to the use of revenue bonds that are quite independent of questions concerned with legal limitations. Legislation providing for the use of revenue bonds exists in 13 states that have no constitutional restrictions. The fact that it is easier to pass a new law than to repeal a statutory restriction may be one reason for the existence of revenue bond laws, under such conditions. A second reason favoring their use would be the desire to segregate more completely the proprietary and governmental enterprises. The revenue bond device would be a useful one for this purpose, even if there were no constitutional or statutory limitations, but it would not be an absolutely necessary one, since the segregation of the revenue and expense items of an enterprise is quite feasible, even though the project is financed by the community's general obligation bonds. Still a third reason calling for the use of revenue bonds as a desirable device, even if no constitutional restrictions existed, would be the desire on the part of the municipal officials that the risk of the enterprise be borne by the revenue bondholders rather than by either the city or its taxpayers.

Possible Alternative Methods

If the revenue bond procedure were not available, what alternative methods would it be possible to use, and how satisfactory would they be? Secondly, getting away from what is possible under the existing state of the law, what would be a desirable arrangement, supposing the necessary changes could be made, and thirdly, how likely is it that the necessary changes can be made?

The oldest method of freeing municipal utility financing from the bonds of debt limitation laws, says Lawrence L. Durisch in an article entitled "Municipal Debt Limits and the Financing of Publicly Owned Utilities,"[5] is the formation of a special utility district. The debts of such a district will not be included in the debt of the municipality, and in this way the borrowing capacity of the locality can be increased to an

[5] *Nat. Mun. Rev.*, XX (August 1931), 460.

amount limited only by the willingness of lenders of funds to accept the district's promises to pay. To the extent that the creation of these special districts requires special legislation or special referendums, the device would have to be included in those that are only potentially available, but frequently the general enabling legislation already exists. Therefore the method may properly be included here as one that is presently available. Present sentiment among students of government is running against the wider use of this device. The prevailing opinion is that we have too many taxing districts already, and that if additional taxes are to be permitted, the main subdivision should be the body to levy them. The experience with the districts' obligations marketwise has not been a happy one either, perhaps largely because of the nature of the enterprises financed. If they had been obligations of municipal water or electric light districts, instead of evidences of debt that were issued by rural irrigation and drainage districts, they might now have a better reputation. As it is, they are an expensive form of borrowing because of the public's lack of confidence.

A second possible alternative is that of the use of a lease agreement. The lease of equipment to a municipality by a private concern with an option to purchase the equipment at the end of an extended period has been held not to violate the constitutional debt limitation provisions, if the pledged payments are a charge only against a special fund, and this despite the fact that the apparent rental contract is, in fact, a purchase.[6] Where the payments are to be made out of the city's general fund, the courts have generally held the obligation to be a "debt." In 1931 Durisch concluded: ". . . the method seems to hold great possibilities as a legal way of evading city debt limitations."[7] Actually, it would seem to be limited to transactions of a rather minor nature, involving, for the most part, movable equipment. A lessor would not be very enthusiastic about entering into such agreements in those cases in which the proposed improvement was to be of a permanent nature and consequently not recoverable by the lessor in case the community failed to meet its periodic payments.

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[6] Jones *v.* City of Corbin, 227 Ky. 674, 13 S. W. (2d) 1013 (1929), as cited by Durisch, *op. cit.*, p. 461.

[7] *Op. cit.*, p. 461.

Conditional sales contracts are devices similar to the lease method and are available without a change of the law. The difference between the two is rather technical. In the case of the lease, the intention ultimately to transfer title to the municipality is not explicitly declared in the beginning, although a covenant may be made that looks toward a possible eventual transfer. In the conditional sales agreement the intention to transfer title is obvious from the beginning. In both cases title to the property remains in the furnisher of the equipment until a date subsequent to that of the original agreement. Conditional sales contracts, also, are best adapted to equipment transactions. Two reasons for believing that the use of conditional sales contracts, like that of leases, has limited possibilities have recently been noted (in addition to the one that calls attention to the inadequacy of such contracts in cases of permanent improvement financing). They are: (1) the small number of companies willing to sell even movable equipment under this type of contract, and (2) the high rate of interest that usually obtains as the result of the absence of competitive bidding for the securities.[8]

A common device that is usually available without additional legislation is the special assessment bond. This method has been losing favor, especially where no recourse is allowed in any event against the general credit of the community. This loss of favor is due to the inadequate assessments levied in the first instance. In many cases no allowance has been made at the time of the original assessment for probable delinquencies in payments.[9] The revenue bond device was originally introduced as a substitute for special assessment bonds, and had the latter been adequate, there would be no widespread use of revenue bonds today. The supplanting of special assessment bonds by revenue bonds is especially well illustrated in the state of Illinois. In a study of the financing of 49 sewerage works located in that state, it was reported that: "Prior to 1934, most of the smaller sewage treatment projects

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[8] Ambrose Fuller, "Conditional Sales Contracts in Municipal Purchases—Financing Self-Liquidating Activities," 3 *Legal Notes on Local Govt.* 267, 271 (March 1938). This article is a reprint of the American Municipal Association Report No. 122.

[9] For a recent study of unsatisfactory experiences with special assessment bonds, see Wm. O. Hall, *Memorandum on Financing Local Improvements in Oregon* (Bureau of Municipal Research and Service, Univ. of Oregon, Eugene, 1936), especially p. 17.

were financed by special assessment, because of the fact that the constitutional limit for general obligation bonds had been approached in financing water, for paving or other improvements."[10] In the financing of the 49 projects undertaken between 1934 and 1936, only three special assessment issues were used, while 10 were general obligation bonds, 28 were revenue, and the other three were a combination of general obligation bonds and revenue bonds.[11] In the cases last mentioned, general obligation bonds were sold to the extent that constitutional debt-incurring power remained in the community, and the revenue bonds were issued to raise the remainder of the money that was needed over and beyond the amount that could be borrowed legally by the use of general obligation bonds.

Possible alternative methods not presently available. The first alternative that comes naturally to mind, if the law could be modified, is the change of the existing constitutional or statutory limitations, either by way of a change in the percentage limits, or by way of exemption of self-supporting enterprises, to the end that orthodox general obligations might be sold to provide the capital for the enterprises. This alternative has much to commend it, since it would make available the next-to-the-cheapest money that a city can get.[12] If the utilities are in fact self-supporting, there would be no added burden upon the taxpayers.

One possibility is that the limitations could be changed in such a way as to permit general obligation bonds to be issued only in connection with the highest grade utilities or services. In this case the suggested change is not a complete alternative to present revenue bond practice, as there would still be a need

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[10] C. W. Klassen and W. H. Wisely, "The Newer Methods of Sewage Works Financing," *Water Works and Sewerage*, LXXXIV (March 1937), 89.

[11] Five of the projects required no bond financing.

[12] That the superiority of the general obligation bond over the revenue bond, where the former can be legally issued, is recognized by at least one community is illustrated by the story of one New York municipal bond man who told the author that he went to a certain New England city to advise it to issue revenue bonds in connection with a proposed service The city fathers objected, saying that general obligation bonds would be cheaper. They felt sure that the bonds, in any case, were going to be paid by the community and out of charges levied for the service, so that, as far as they could see, the incidence of the costs would not be greatly affected by the type of financing, but only the total sum of the burden. The bond man said that he had no answer for the city's argument and it proceeded to issue general obligation bonds.

for a method of financing that would be applicable to the second- (and third-) rate enterprises.

If the change were simply one of increasing the percentage of the community's assessed value that it could borrow, there would be the risk that the added margin of debt-incurring power might be used up for paving, schools, sidewalk, and other nonrevenue-producing works before the utilities were benefited. Better than a mere increase in the percentage that could be borrowed would be the earmarking of the increase, or a portion of it, for the use of revenue projects. At the same time, provision might be made for exempting the utility debt to the extent that it is self-supporting, rather than allowing no credit at all, even if the enterprise brings in 95 per cent of its costs. Pennsylvania is an illustration of a state in which no exemption is allowed unless the utility is completely self-supporting.[13]

It may be objected that it is too hard, in practice, to change the legal limits. An answer to that allegation is that it is being done. The constitutions of the states have been amended in eight cases in order to permit the use of revenue bonds, and the statutory restrictions of one or more states have been altered in every year since 1932. A Virginia act of 1933 [14] exempted from the limitations debts that were incurred by the Commonwealth's communities in connection with loans received from the Federal government. A somewhat similar Oregon law of 1937 [15] exempts general obligation bonds from the debt limit up to an additional 5 per cent of the latest assessed value, if the borrowing is connected with a PWA project, and if the bonds are issued prior to December 31, 1939. An Illinois statute of 1936 [16] increased the percentage of assessed value that might be represented by general obligation bonds from 2½ per cent to 5 per cent for cities under 5,000 population, providing the additional financing was to be used for sewerage improvements.

As a matter of fact, six states were reported to have altered, during 1937 alone, their statutory percentage limitations as to

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[13] See Clarence G. Shenton, "The City in the State Constitution," *Ann. of the Amer. Acad.*, CLXXXI (September 1935), 177.

[14] Chap. 26.

[15] Chap. 369.

[16] Laws (1936), p 931.

the amount of subdivision debt that was permissible.[17] As long as ways and means are being found, and tolerated, of borrowing funds for proprietary enterprises, about all that debt-limit regulations accomplish is to raise the cost of the money to the sponsors, *i.e.*, the cities, and the cost of the service ultimately to those who use the facilities, while preventing the contracting of obligations that would rank as contingent liabilities of the taxpayers. Insofar as the consumers and taxpayers are identical—and this must be largely so in the cases of water and sewage projects—the restrictions place an added burden upon the taxpayers, provided always, of course, that the project would not be allowed to default if revenue bonds only were used. Even then, the reflex effects of the default on the community's credit might result in net loss to the taxpayer, by way of higher interest charges on the community's future issues of general obligation bonds.

There remains the alternative of the revenue-general obligation bonds. All the arguments against the practicability of altering constitutional or statutory requirements that relate to general obligation bonds hold good against these bonds, which are payable out of revenues in the first instance, but out of taxation, if necessary, in the second instance. If the general obligation bonds desired to be offered would exceed the debt limit, so would the revenue-general obligation bonds. But while it might not be possible, in the absence of revenue bond legislation, to use them in many states at the present time, there is much to be said for the type.

In the first instance, at least, these revenue-general obligation bonds are the cheapest source of funds for the municipality—even cheaper than the straight general obligation bonds—because of their composite pledge of both the community's general credit and particular revenues. As against this first low cost should be set off the amounts of principal and interest which will be paid under this method and avoided under a less secure method of financing. Possibly, considering the public's short memory and the ability of a defaulting city or state to borrow new money at a comparatively low rate almost immediately after a default has occurred, it may actu-

[17] *Municipal Finance Legislation: 1937* (Public Administration Service, Chicago, Ill., 1938), p. 44 f.

ally be expensive for the city to issue such bonds. From the investor's standpoint, however, they would be most attractive. If one believes that the true interest of both the community and the investor lies in financing with bonds of the highest certainty of payment, it would seem desirable that this type of obligation should become a more prominent form of financing, giving, as it does, the advantages of both types, general obligation and revenue. There appears to be, even now, a discernible increase in the use of these combination bonds. In any evaluation of this method, however, the effect upon the other general obligation bonds, if many of the surest sources of income are pledged, ought not to be disregarded.

Street railway bonds of the city of Detroit, electric light and water bonds of the city of Cleveland, electric light bonds of Memphis, a portion of the water bonds of Knoxville, and water and electric light bonds of Lansing, Michigan, are some of the larger issues, already outstanding, that have combined a pledge of taxes and revenues. Of course, holders of such bonds, having two sources of protection, may fare better than holders of either straight revenue bonds or straight general obligation bonds of the same or comparable cities. Even these bonds, however, are not immune from defaults, at least in the smaller communities. The Tarrant City, Alabama, 6 per cent refunding public improvement bonds are: (1) general obligation bonds of the city, (2) additionally secured by a pledge of improvement assessments, (3) further secured by a pledge of all revenues from privilege or license taxes imposed on dealers in gasoline or other motor fuels, and (4) still further secured by a pledge of all uncollected assessments stemming from two ordinances. Despite the pledging of all of these additional sources of income the bonds defaulted.[18]

Results

The entire picture of $1,000,000,000 of revenue bond projects, consisting of hundreds of water, sewer, bridge, electric light, gas, and the other public utilities or services, as promoted by states, municipalities, or authorities, constitutes in large part the result of the revenue bond device. Many of

[18] *Moody's Manual, Governments and Municipals: 1938,* p. 128.

the projects, perhaps most of them, would never have been built except for the device. Regarding those that would have been built in any case, many were built at less cost, or with more justice to the taxpayers and users, or more quickly, because of the existence of the revenue bond procedure.

However, simultaneously with these obvious results of the existence of revenue bonds, certain secondary effects, not unimportant to the general welfare, have appeared. For instance, the statutory provisions requiring installation and maintenance of proper systems of account, the preparation and publication of annual financial statements, and the conducting of annual audits have tended to improve municipal fiscal habits. The same is true of the requirements as to the safekeeping of funds before, during, and after construction. Another secondary effect of the use of revenue bonds is the increased resort to the metering of services. This should, in turn, result in a greater degree of justice to the respective users, and is usually followed by increased total receipts for the cities that adopt the practice. These secondary effects of the use of revenue bonds may all be summed up by saying that the use of revenue bonds is conducive to the exercise of good business methods, while the use of mere general obligation bonds more readily permits the hiding of the true facts relative to income and expense of a utility or service.

To turn from the general effects of the use of revenue bonds to the question of the effect upon particular groups, what are the results for the consumers, for the taxpayers, for the city (insofar as it can be considered apart from the consumers and the taxpayers), and for the investors?

The main argument against the use of revenue bonds from the standpoint of the user of the services is that the device calls for payment by the consumer according to direct benefit received and quite independently of his ability to pay. In recent years the trend, as indicated by our free schools, free parks, free libraries, and free music has been distinctly in the direction of collecting all costs of the municipalities' activities according to the varying ability of the inhabitants to pay, and distributing the sums collected in accordance with the needs of individuals, or at least their conceived needs. Horace Secrist wrote, in 1914, "We are moving from the principle of the fee and price to the principle of the tax: in public ex-

penditure, the movement is from special measurable benefit to common immeasurable benefit." [19]

This movement has continued, and today the most advanced theory holds that happiness per dollar of social expenditure would be maximized by a fuller use of facilities, even if such use could be obtained only by supplying service free, or nearly free, to the immediate users.[20] The revenue bond principle, in its emphasis upon payment by the user of the service, and in proportion to the benefit received, represents, therefore, a return to the former benefit theory of the allocation of public costs, and is inconsistent with the present movement.

On the other hand, there may be cases where the consumers are a special group, quite able to pay, and where the financing of the project out of local taxation would be unfair to a group of taxpayers that is less able to pay than are the consumers. A rural toll bridge on a national highway that is used primarily by tourists, would seem to be a case in point. The concern for the consumer implied in the argument based upon the ability-to-pay theory is weakened by its assumption that the consumer is always poor and the taxpayer always rich. This assumption is wrong on two counts. The taxpayer and consumer may, in some instances, be the same individual, in which case he may contribute in the same proportion whichever financing system is used; second, the consumers, as in the case of visitors to resort cities, may be the better able to pay.

In any case, against the burden which the use of revenue bonds may place upon consumers, there needs to be weighed the enjoyment of utilities and services, the construction and operation of which is made possible solely by the existence of the revenue bond method of financing. Some consumers may have paid slightly more for the services that they have en-

[19] Horace Secrist, *An Economic Analysis of the Constitutional Restrictions upon Public Indebtedness in the United States,* Bulletin No. 637 (Univ. of Wisconsin, Madison, Wis., 1914), p. 47. See also Jens P. Jensen, *Government Finance* (Thomas Y. Crowell Co., New York, 1937), p. 28, for a similar view of the trend 23 years later.

[20] R. G. Hawtrey, "The Finance of Publicly Owned Utilities in Relation to the General National or Local Finance," *Public Administration,* IV (October 1926), 352 ff. Also Harold Hotelling, "Prosperity Through Increased Production," a paper presented before the Econometric Society, Philadelphia, Pa., Dec. 27, 1933.

joyed than they would have paid had the services been financed by general obligation bonds, but the net gain from the services themselves, whose very existence the revenue bond financing effected, would seem to more than offset this added cost. The proper contrast in many cases, perhaps in most, is not between the cost of the service to the consumers under two different methods of financing and charging, but between the cost under revenue bond financing, and doing without the service altogether.[21] So far, the consumer's complaints have been conspicuous by their absence.

Turning to the taxpayer, we can see that he may be the beneficiary of revenue bonds, if he is contributing more money, or has contributed more, as a taxpayer than as a consumer. This would be especially true of owners of unimproved property. Owners and occupants of improved property would tend to pay the construction costs of the utility or service, both as used by them and as made available to the unimproved property. Charging high utility rates, as in Jacksonville, Florida, with subsequent transfer of surpluses to the city's general fund, may even result in a considerable lessening of a burden previously borne by the taxpayers.

On the whole; however, the taxpayers' publications are not friendly to the revenue bond principle. One writer bemoans "the liberal, unsound, political device of the revenue bond." [22] The reason for the taxpayers' opposition is their fear that taxes will eventually be levied in order to prevent revenue bond defaults, just as happened in the case of their predecessors, the special assessment obligations.[23] The realization that, after all, payments on revenue bonds come out of the community's total resources quite as much as do payments on tax bonds also motivates the opposition,[24] while exponents of that point

[21] This was notably the case, for instance, in Little Rock, Arkansas, where one informant said: "The city formerly had the worst drinking water in the country." The recent project was impossible apart from revenue bond financing.

[22] James Mussatti, "Revenue Bond Bills," *Tax Digest,* XIII (April 1935), 114.

[23] See *ibid.,* p. 140, for particular instances. Also the *Bond Buyer,* XCVI (March 12, 1938), 11, in which it was reported that Paducah, Ky., paid $100,-000, "like scores of other cities in the United States," out of its general fund, in order to retire special assessment high-rate bonds which the city, itself, was under no legal obligation to redeem.

[24] See Mussatti, *op. cit.,* p. 114.

of view tend to ignore the increase in the community's resources that is made possible by the financing and from which the principal and interest payments will be made.

Turning to the investor, the strong points in regard to revenue bonds are: (1) the pledging of a type of income that may be surer than taxes, (2) the possibility of giving preferred status to a limited amount of bonds, whereas general obligation bonds are usually all equally secured, and (3) the provision of a better remedy than is accorded general obligation bonds.[25]

On the other hand, the dangers include (1) invalid issuance, in this comparatively new field, (2) use in connection with promotional and experimental projects, (3) obsolescence of the project before the bonds can be retired, and (4) too large issues relative to the total cost of the project.

Regarding these dangers, time will bring a standardization of statutes, court decisions, resolutions, and indentures that will make the validity of revenue bond issues as dependable as general obligation bonds have become. And perhaps time will also cause the use of the device to be confined to the more tried fields of municipal enterprise. The danger of obsolescence as a result of new inventions, or otherwise, would seem to be one that will be a continuing hazard, more so in the case of some utilities than in others, but never altogether absent. Every invention is "inconceivable" until its possibility is perceived by the inventor, and apart from new inventions, people's whims, fancies, customs—even their "needs" —change. The fourth danger mentioned, that of the issue of bonds in an amount equal to the whole cost of the project, is the most serious danger confronting the investor, according to Robert Taft.[26] "They are to a large extent equity securities masquerading as bonds,"[27] he says. While this is apt to be true at the time of original issue, it should be noted that the projects so financed are almost always monopolies, in

[25] See Chapter III. The relative situation of revenue bonds and general obligation bonds depends upon so many factors that these are cited only as ways in which revenue bonds *might* fare better, just as the following list cites ways in which they might fare worse. There are strong and weak revenue bonds, and strong and weak general obligation bonds. Only a comparison of the actual bonds could decide which were the better ones.

[26] "A Review of the Special Lien Bond Situation," *Jour. of the Amer. Water Works Assn.*, XXVII (October 1935), 1348.

[27] *Ibid.*

which case there is no competition that will tend to hold rates down to what will barely cover costs, and therefore, no direct relation between cost and income. In fact, the cost factor is largely irrelevant. Secondly, unlike private plants which do not amortize their debt, we are dealing here with municipal plants that do. Therefore, a seasoned revenue bond issue could show an equity and an ever-increasing one, the more seasoned it was. This not only could happen but would happen, in the standard situation, since serial or sinking fund payments are made more rapidly than depreciation occurs.[28] Thus even if the investor demands an equity behind his bonds, it can be had on the older revenue bonds, and will soon be available on recently issued bonds.[29]

A factor that might be an advantage or a disadvantage to the investor, depending upon the policy and personnel of the state supervisory administration, is the power which some states' public service commissions or other similar bodies exercise over revenue bond projects. Generally speaking, such projects have been exempted from the control of administrative bodies, but not always. Indiana cannot make up its mind. Five of its applicable acts provide for supervision, while two do not, yet all apply to utilities.[30]

If judiciously issued, revenue bonds ought not to prove a drain, even indirectly, upon the taxpayers, and should be beneficial to the consumers of the services which their issue makes possible. If judiciously purchased, they should reward the buyer beyond what he could secure from any other municipal or public obligation. From the standpoints of the city and of the consumers, they may be the only means of enabling a necessary service to be rendered.

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[28] Earl H. Barber, in "Forty Years of Public Ownership," *The Jour. of Land and Pub. Util. Econ.*, X (November 1934), 328 f., found that, at the time of his study, only about 10 per cent of the cost of the property in the Massachusetts municipal electric light plants was represented by debt.

[29] Of course, there is an equity even in newly issued bonds in those cases in which the bonds are related to projects carrying PWA grants.

[30] As noted by Adolph H. Zwerner, in "Indiana Municipal Revenue Bond Financing," 12 *Indiana Law Jour.* 266, 280 (April 1937).

APPENDIX A

Revenue Bond Statutes[1]

(As of Jan. 1, 1938)

Alabama: Gen. Acts (1931), No. 118, p. 186 (toll bridges); Gen. Acts (Ex. Sess. 1932), No. 264, p. 254 (sewers and sewage disposal); No. 265, p. 264 (waterworks); Gen. Acts (Ex. Sess. 1933), No. 46, p. 22 (waterworks); No. 47, p. 29 (sewage works); No. 102, p. 88, as amended by Gen. Acts (1935), No. 46, p. 108 and by Gen. Acts (Spec. Sess. 1936–1937), No. 203, p. 236 (water, sewer, sewage disposal and gas); Gen. Acts (Ex. Sess. 1933), No. 107, p. 100 (electric light and power generating and distribution plans and systems); Gen. Acts (1935), No. 154, p. 195 (causeways, tunnels, viaducts, bridges and other crossings, highways, parks, parkways, airports, docks, piers, wharves, seaport or river terminals, hospitals, public markets, tennis courts, swimming pools, golf courses, stadiums, armories, auditoriums, and other public buildings of all kinds, incinerator plants, water systems, sewer systems, gas or electric heat, light or power systems for public and private uses, cold storage plants, cooling plants, sterilization plants, warehouses, granaries, and any other plants, works, machinery or equipment useful for the preservation or preparation of agricultural products for market or use and for the conversion of agricultural products into usable and marketable condition and for the conversion of the same into usable and marketable products).

Arizona: Laws (3rd Spec. Sess. 1933), c. 9 as amended by Laws (1937) c. 15 (any work or undertaking not prohibited by the state constitution); Laws (3rd Spec. Sess. 1933), c. 11 as amended by Laws (1937) c. 12 (light and power, water, sewer, gas, garbage and rubbish plants).

Arkansas: Acts (1933), No. 131, as amended by Acts (1935), No. 96 and No. 107 (waterworks); Acts (1933), No. 132 (sewers and sewage disposal).

California: Stat. (1933), c. 331, p 909, Gen. Laws (Deering Supp. 1933), Act 7559, as amended by Stat. (1935), c. 762, p. 2138, Gen. Laws (Deering Supp. 1935), Act 7559 (sewers and sewage disposal); Stat. (1933), c. 609, p. 1551, Gen. Laws (Deering Supp. 1933), Act 9178a (waterworks); Stat. (1935), c. 286, p. 1004, Gen. Laws (Deering Supp. 1935), Act 881h.

Colorado: Laws (Ex. Sess. 1933), c. 16, as amended by Laws (1935), c. 180 and by Laws (1937), c. 218 (all types of revenue-producing undertak-

Connecticut: Pub. Acts (1931), No. 237, Pub. Acts (1933), No. 321, Gen. Stat. (Cum. Supp. 1931, 1933, 1935), c. 33(a) (sewers and sewage disposal); Pub. Acts (1933), No. 312, Gen. Stat. (Cum. Supp. 1931, 1933, 1935), c. 33(b) (water).

Delaware: Laws (2d Spec. Sess. 1933), c. 21 (sewers, drainage systems, sewage disposal or treatment plants, reservoirs, waterworks, streets, bridges, highways, gas, heat, light, power systems and other permanent municipal improvements).

Florida: Special Acts (1933), c. 16344 (toll bridge across Apalachicola River); Laws (1935), c. 16847 (deep water ship harbor with dock and terminal facilities by the Canaveral Harbor District); Laws (1935), c. 17118, as amended by Laws (1935), c. 17119 (waterworks, sewers, sewage disposal, garbage collection and disposal, airports, hospitals, jails, golf courses, gas plants); Laws (1935), c. 17174 (airports, auditoriums, bridges, tunnels, viaducts, city and town halls, community houses, hospitals, sanitaria, dispensaries, jails, ice plants, precooling and cold storage plants and warehouses, dredging and deepening harbors and channels, jetties, breakwaters, public landings, wharves, docks, warehouses, and other improvements for harbors and shipping facilities, libraries, markets, memorials, parks, playgrounds, recreation centers, public buildings and plazas, reservoirs, schools, sewers, sewage or drainage systems and sewage disposal or treatment plants, stadiums, streets, roads, avenues, alleys and highways, sidewalks, curbs, and gutters and storm water sewers and drains, swimming pools—by cities and towns located in counties having a population of not more than 31,000 and not less than 29,000 and any county having such population); Laws (1935), c. 17175 [similar to Laws (1935), c. 17174, but applicable only to Sumter County, Pasco County and cities and towns located in said counties]; Laws (1935), c. 17176 [similar to Laws (1935), c. 17174, but applicable only to cities and towns located in a county having over 180,000 population and to counties having such population]; Laws (1935), c. 17177 [similar to Laws (1935), c. 17174, but applicable only to cities and towns located in a county having not less than 10,000 nor more than 10,500 population and to any county having such population]; Laws (1935), c. 17246 (toll bridge by Duval County); Special Acts (1935), c. 17558 (public buildings, golf courses, waterworks systems, water softening plants, board walks, sewerage systems, fishing piers, casinos, streets and parkways, parks, sea walls, public utilities, aviation fields, community and recreation centers, playgrounds, baseball fields, sport stadiums—applicable only to the City of Hollywood); Special Acts (1935), c. 17640 (toll bridge by Special Road and Bridge District No. 5 of Palm Beach County); Special Acts (1935), c. 17642 (waterworks improvements by City of Panama City); Special Acts (1935), c. 17644 (water supply and distribution system by Pinellas County); Laws (1935), c. 16837 (toll bridge by Bridge District of Palm Beach).

Georgia: Laws (1937), No. 513, p. 761 (causeways, tunnels, viaducts, bridges, and other crossings, highways, parkways, airports, docks, piers, wharves, terminals and other facilities, systems, plants, works, instrumentalities and properties used and useful for water or sewage).

Illinois: Laws (1899), p. 104, as amended by Laws (1931), p. 376 and

Laws (3rd Spec. Sess. 1933–1934), p. 141, Rev. Stat. (1935), c. 24, § 1087 *et seq.* (waterworks); Laws (1913), p. 455, as amended by Laws (1915), p. 557, Rev. Stat. (1935), c. 111a, § 9 (any public utility); Laws (1927), p. 337, Rev. Stat. (1935), c. 24, § 1093 *et seq.* (waterworks); Laws (1929), p. 273 as amended by Laws (1935), p. 552, Rev. Stat. (1935), c. 24, § 1093 (14) *et seq.* (waterworks); Laws (1933), p. 276 as amended by Laws 3rd Spec. Sess. (1933–1934), p. 128, Rev. Stat. (1935), c. 24, § 1076 (1) *et seq.* (sewers); Laws (1st Spec. Sess. 1933), p. 15, Rev. Stat. (1935), c. 24, § 638 (13) *et seq.* (natatoriums and swimming pools); Laws (3rd Spec. Sess. 1933–34), p. 136, Rev. Stat. (1935), c. 24, § 1076 (13) *et seq.* (combined waterworks and sewer systems); Laws (1935), p. 351, Rev. Stat. (1935), c. 24, § 508 (1) *et seq.* (airports); Laws (1935), p. 278, Rev. Stat. (1935), c. 24, § 1129 (1) *et seq.* (extensions and betterments to existing electric light plants); Laws (1935), p. 431, Rev. Stat. (1935), c. 24, § 605 (1) *et seq.* (maternity hospitals); Laws (1935), p. 370, Rev. Stat. (1935), c. 24, § 605 (7) *et seq.* (hospitals for contagious disease); Laws (1935), p. 552, Rev. Stat. (1935), c. 24, § 1093 (14) *et seq.* (improvements and extensions of existing waterworks); Laws (1935), p. 294, Rev. Stat. (1935), c. 24, § 519 (4) *et seq.* (toll bridges); Laws (1937), p. 281, Rev. Stat. (1937 Supp.), c. 24, § 642i(2) *et seq.* (airports).

Indiana: Acts (1921), c. 96, as amended by Acts (1925), c. 56 and Acts (1927), c. 190, and Acts (1929), c. 88 and c. 137, and Acts (1931), c. 79, Stat. Ann. (Burns 1933), §§ 48–5345 *et seq.* (waterworks); Acts (1929), c. 114, Stat. Ann. (Burns 1933), §§ 36–2425 *et seq.* (bridges); Acts (1929), c. 155, as amended by Acts (1931), c. 14 and Acts (1933), c. 254, Stat. Ann. (Burns 1933), §§ 48–5328 to 48–5344 (waterworks); Acts (1932), c. 8, Stat. Ann. (Burns 1933), §§ 48–7301 (water, sewer, steam, electric light, gas); Acts (Spec. Sess. 1932), c. 61, as amended by Acts (1933), c. 187, §§ 1, 2 and Acts (1935), c. 198, § 1, Stat. Ann. (Burns 1933), §§ 48–4301 to 48–4324 (sewage and sewage disposal); Acts (1933), c. 85, Stat. Ann. (Burns 1933), §§ 48–2601 *et seq.* (auditoriums, recreation buildings and works); Acts (1933), c. 125, as amended by Acts (1935), c. 311, Stat. Ann. (Burns 1933), §§ 48–7119 (any utility); Acts (1933), c. 190, as amended by Acts (1935), c. 293, Stat. Ann. (Burns 1933), §§ 54–105 *et seq.* (any utility); Acts (1933), c. 235, Stat. Ann. (Burns 1933), §§ 48–5301 *et seq.* (waterworks); Acts (1933), c. 259, Stat. Ann. (Burns 1933), §§ 48–5441 *et seq.* (waterworks); Acts (1935), c. 242, Stat. Ann. (Burns 1933), Pocket Supp. §§ 48-6023 (cemeteries); Acts (1937), c. 15 (swimming pools); Acts (1937), c. 56 (golf courses); Acts (1937), c. 72 (sewage).

Iowa: Acts (1931), c. 158, Iowa Code (1931), §§ 6134–d1 to 6134–d7, as amended by Acts (Ex. Sess. 1933–34), c. 74 (public utilities); Acts (1933), c. 111, as amended by Acts (Ex. Sess. 1933–34), c. 71 (sewage treatment plants, swimming pools, golf courses); Acts (1933), c. 112 (hospitals).

Kansas: Laws (Spec. Sess. 1933), c. 32 (utilities); Laws (Spec. Sess. 1933), c. 43 (levees, docks, wharves, river terminals, storage facilities); Laws (1937), c. 135 (public levees); Laws (1937), c. 378 (water); Laws (1937), c. 379 (water).

Kentucky: Acts (1926), c. 133, Stat. (Carroll 1936), § 2741L–1 to 2741L–20 as amended by Acts 1930, c. 92, Stat. (Carroll 1933), § 2741L–23 to 2741L–42 and by Acts (1932), c. 109, Stat. (Carroll 1933), § 2741L–43 to 2741L–45, and by Acts (1936), c. 81, Stat. (Carroll 1936), § 2741L–1, 2, and 19, (waterworks and sewage); Acts (1928), c. 172, p. 565, Stat. (Carroll 1933), §§ 4356s–1 to 4356s–15 (bridges); Acts (1928), c. 173, p. 575, Stat. (Carroll 1930), §§ 938p–1 to 938p–5, as amended by Acts (1930), c. 157 Stat. (Carroll 1933), §§ 4356s–16 to 4356s–38 (bridges and tunnels); Acts (1932), c. 119, Stat. (Carroll 1936), § 3480d–1 to § 3480d–22, as amended by Acts (1936), c. 77 (electric light, heat and power plants); Acts (1936), c. 81 (waterworks and sewerage system); Acts (1936), c. 77 (electric light, heat and power plants); Acts (1934), c. 113, p. 507, Stat. (Carroll 1934), §§ 2741x–1 to 2741x–15 (low-cost housing); Acts (Ex. Sess. 1934), c. 15, Stat. (Carroll 1935), §§ 4421–20 to 4421–38 (school buildings); Acts (Fourth Spec. Sess. 1936–1937), c. 22 (municipal university law school buildings).

Louisiana: Constitution, Art. 14, § 14(m), (revenue producing utilities); Acts (Ex. Sess. 1921), No. 80, Gen. Stat. (Dart 1932), §§ 5757–5763 (revenue producing utilities); Acts (1934), No. 31, p. 191 (sewer and sewage disposal); Acts (1934), No. 49, p. 247 (gas).

Michigan: Constitution of 1908, Art. 8, § 24 (public utilities); Public Acts (1909), No. 278, as amended by Pub. Acts (1921), No. 349, and by Pub. Acts (1925), No. 303, and by Pub. Acts (1929), No. 153 (any public utility). Pub. Acts (1909), No. 279, as amended by Pub. Acts (1913), No. 5, and by Pub. Acts (1915), No. 210.

Pub. Acts (1927), No. 320 (sewage); Pub. Acts (1929), No. 126 (any public utility); Pub. Acts (1931), No. 316 (sewage disposal); Pub. Acts (1933), No. 94, as amended by Pub. Acts (1935), No. 66 (housing facilities, garbage, rubbish and sewage disposal plants and systems, incinerators, public markets and storage facilities, merchandise marts, industrial marts, commercial marts, yacht basins, harbors, docks, wharves, terminal facilities, bridges over, tunnels under, ferries across rivers, streams and channels, community buildings, stadiums, convention halls and auditoriums, dormitories, hospitals, buildings devoted to public use, parks and recreational facilities, reforestation projects, aeronautic facilities and marine railways); Pub. Acts (Ex. Sess. 1933), No. 18 (housing facilities); Pub. Acts (Ex. Sess. 1934), No. 39 (sewage disposal plants and systems, incinerators, housing facilities, public markets, yacht basins, harbors, docks, wharves, elevated highways, terminal facilities, bridges over, tunnels under, ferries across rivers, streams, straits and/or channels within or bounding any such public body, community buildings, stadiums, convention halls and auditoriums, dormitories, hospitals, buildings devoted to public use, parks and recreational facilities, reforestation projects, aeronautic facilities and marine railways); Pub. Acts (1935), No. 147 (toll bridges).

Minnesota: Laws (1937), c. 57 (sewers and sewage disposal).

Mississippi: Laws (1934), c. 316, as amended by Laws (1936), c. 318 (waterworks, water supply, electric light or generating electric plants, electric distribution system, electric transmission system, gas system, garbage, rubbish or sewage disposal plants, incinerators, storage facilities,

docks, wharves, terminal facilities, cotton compresses, airports, hospitals, warehouses); Laws (1934), c. 317 as amended by Laws (1936), c. 186 (waterworks, water supply, sewage disposal system, gas system, electric transmission and distribution system, garbage disposal system, rubbish disposal system, toll bridges, viaducts, docks, wharves, terminal facilities, hospitals, airports, incinerators, storage facilities, warehouses and cotton compresses); Laws (Ex. Sess. 1935), c. 44 (toll bridges); Laws (1936), c. 185 (electric systems).

Missouri: Constitution of 1920, Art. 10, § 12 (water, gas, light works, street railways, telegraph and telephone, heating and ice plants); Laws (1921), p. 165, Rev. Stat. (1929), §§ 7705–7707 (water, gas, light works, street railways, telegraph and telephone, heating and ice plants); Laws (Ex. Sess. 1933–1934), p. 115 (toll bridges); Laws (Ex. Sess. 1933–1934), p. 102 (mineral springs and wells).

Montana: Laws (Ex. Sess. 1933–34), c. 24 (public works); Laws (1935), c. 141 (water, gas, sewage disposal, heating systems); Laws (1937), c. 115 (highways, schoolhouses, parks, public buildings, water, housing and any other publicly owned facilities).

Nebraska: Laws (1929), c. 176, p. 607, Comp. Stat. (1929), §§ 14–1201 to 14–1228 (roads and bridges); Laws (1933), c. 146, p. 561, Comp. Stat. (1933), § 18–1401 *et seq.* (sewage disposal); Laws (1935), c. 87, p. 278 (bridges); Laws (1937), c. 29 (water); Laws (1937), c. 37 (public docks).

Nevada: Laws (1937), c. 109 (water and sewage).

New Hampshire: Laws (1935), c. 113, as amended by Laws (1937), c. 9 [abattoirs, airports, auditoriums, bridges, tunnels, and viaducts, town and city halls, bulkheads, jetties, harbors and harbor structures, community houses, court houses, dams, docks, piers and wharves, gas or electric heat, light and power plants, and systems for the distribution thereof; hospitals, sanitaria, dispensaries, alms-houses, jails, workhouses and reformatories; libraries, markets, memorials, museums and art galleries; parks, playgrounds, and recreation centers; golf courses and buildings in connection therewith; public buildings and plazas, reservoirs, waterworks and water distributing systems, schools (where the municipality does not constitute an independent school district); sewers, sewage or drainage systems and sewage disposal or treatment plants; stadiums; streets, roads, avenues, alleys and highways; sidewalks, curbs, gutters and storm sewers or drains; swimming pools].

New Mexico: Laws (1933), c. 57, as amended by Laws (Spec. Sess. 1934), c. 4, and Laws (1937), c. 61 (any public utility, source of water supply, pumping plant or necessary appurtenances); Laws (1935), c. 51 (auditorium and other public buildings).

New York: Laws (1927), c. 650, § 6–d, p. 1596, Consol. Laws, Village Laws, § 89, subd. 37 (any municipal purpose); Laws (1935), c. 525 (causeways, tunnels, viaducts, bridges and other crossings, highways, parkways, airports, docks, piers, wharves, water supply, disposal of waste, sewage and storm water).

North Carolina: Private Laws (1903), c. 196 (water works by city of Charlotte); Pub. Laws (1935), c. 473, p. 827 (water, sewage, gas or electric heat, light or power).

North Dakota: Laws (1929), c. 172, p. 218, as amended by Laws (1935), c. 200, p. 270 (electric light and power); Laws (1933), c. 179, p. 276 as amended by Laws (1935), c. 202, p. 271 (garbage and sewage disposal); Laws (1937), c. 104 (water, sewage, gas, electric light, heat and power).

Ohio: Constitution, Art. 18, § 12 (public utilities); Laws (1919), Part I, p. 220, Gen. Code, § 412-2 (state water control); Laws (2nd Spec. Sess. 1933), p. 191, Gen. Code, § 7902-1 *et seq.* (buildings by municipal universities and colleges).

Oregon: Laws (1933), c. 289, Code (Supp. 1935), §§ 56-1811 to 56-1817 (sewers and sewage disposal); Laws (1937), c. 455 (any project not prohibited by the Oregon constitution, including auditoriums, museums, city and town halls, courthouses, jails, parks, reservoirs, waterworks and water distribution systems, sewers, sewage or drainage systems, and sewage disposal or treatment plants, streets, bridges and highways, and swimming pools); Laws (1937), c. 45 (water supply).

Pennsylvania: Constitution, Art. IX, § 15 (waterworks, subways, underground railways, street railways or appurtenances thereof); Laws (1915), p. 846 (waterworks, subways, underground railways, street railways or appurtenances); Laws (1927), p. 519 (waterworks by boroughs); Laws (1937), c. 146 (sewers); Laws (1937), c. 147 (sewers); Laws (1937), c. 148 (sewers); Laws (1937), c. 149 (sewers); Laws (1937), c. 260 (sewers); Laws (1937), c. 394 (sewers); Laws (1937), c. 507 (waterworks).

South Carolina: Acts (1933), No. 236, as amended by Acts (1934), No. 740 (waterworks, sewage, hospitals, power plants and electrical distribution systems, toll bridges, ferries, drainage systems, grading and paving and repairing streets, and sidewalks and highways, public buildings and common jails); Acts (1933), No. 299, as amended by Acts (1934), No. 798 (waterworks, water supply, sewer, sanitary disposal equipment, light plant, natural gas systems, ice plants, power plants and distribution systems, gas plants, incinerator plants, hospitals, piers, docks, terminals, airports, toll bridges, ferries, drainage systems, city halls, court houses, armories, fire stations, auditoriums, hotels, municipal buildings, theatres, community auditoriums, and hotels, city halls and hotels, public buildings and structures, public markets, public recreation parks, swimming pools, golf courses and stadia).

South Dakota: Sess. Laws (1931), c. 194 (waterworks and light, heat and power systems); Sess. Laws (1935), c. 163, p. 251 (water, sewerage, gas or electric heat, light or power).

Tennessee: Pub. Laws (1933), c. 68 (waterworks and sewers); Priv. Laws (1933), c. 469 and 538 (electric light, heat and power by town of Lewisburg and city of Columbia); Pub. Laws (Spec. Sess. 1935), c. 33, as amended by Pub. Laws (1937), c. 230 (water, sewage, gas or electric heat, light or power works, plants and systems); Pub. Laws (Spec. Sess. 1935), c. 11, as amended by Pub. Laws (1937), c. 232 (bridges, tunnels, viaducts, court-houses, hospitals, sanitaria, dispensaries, almshouses, jails, workhouses, reformatories, public buildings, plazas, schools, roads, highways, by counties); Pub. Laws (Spec. Sess. 1935), c. 10, as amended by Pub. Laws

(1937), c. 235 (abattoirs, airports, auditoriums, bridges, tunnels, viaducts, city and town halls, fire halls, community houses, court houses, grain elevators, wharves, docks, harbor and river front improvements, reclamation of land, hospitals, sanitaria, dispensaries, almhouses, jails, workhouses, reformatories, libraries, markets, memorials, parks, playgrounds, recreation centers, public buildings, plazas, reservoirs, waterworks, water distribution system, schools, sewers, sewerage or drainage systems, sewerage disposal or treatment plants, incinerators, stadiums, streets, roads, avenues, alleys, highways, sidewalks, curbs, gutters, storm water sewers or drains, swimming pools—by cities and incorporated towns).

Texas: Acts (1927), c. 194, Comp. Stat. (1928), §§ 1111–1113, as amended by Acts (1931), c. 314, Comp. Stat. (Supp. 1931), § 1118a, Acts (3rd Called Sess. 1932), c. 20, Acts (1933), c. 53 and c. 122, Comp. Stat. (Supp. 1934), §§ 1118a, 1111–1114c, Acts (1st Called Sess. 1933), c. 36, Comp. Stat. (Supp. 1934), § 1109a, Acts (4th Called Sess. 1934), c. 18, p. 49 and Acts (2nd Called Sess. 1937), H.B. 164, Comp. Stat. (Supp. 1937), § 1118c (light, water and sewer); Acts (1933), c. 63, p. 132, Comp. Stat. (Supp. 1934), § 2919b (school canning factories); Acts (1925), c. 33, as amended by Acts (1st Called Sess. 1933), c. 36, p. 113, Comp. Stat. (Supp. 1934), § 1109a (waterworks); Acts (2nd Called Sess. 1934), c. 17, p. 48 (toll bridges), c. 24, p. 22 (airports); Acts (3rd Called Sess. 1934), c. 22, p. 39 (fish markets); Acts (4th Called Sess. 1934), c. 21, p. 53 (abattoirs); c. 30, p. 73 (boathouses); c. 31, p. 76 (gymnasia, stadia and other recreational facilities); Acts (1935), c. 132, p. 364 (airports); Acts (2nd Called Sess. 1937), S.B. 26, Comp. Stat. (Supp. 1937), § 1109d (waterworks); Acts (1937), H.B. 147, Comp. Stat. (Supp. 1937), § 1175b (motor vehicle testing stations).

Utah: Constitution, Art. XI, § 5(d), (any public utility); Laws (2nd Spec. Sess. 1933), c. 22, as amended by Laws (1935), c. 74 (waterworks, sewer, sewage disposal, ice plants, gas or electric systems, toll bridges, hospitals, slaughter houses and any public project or service which may be lawfully owned, operated or managed by any county, city or incorporated town).

Vermont: Acts (1935) No. 69, as amended by Acts (1935), No. 70 (any public utility).

Virginia: Const. 1902, § 127(b), (waterworks, electric lights or other system from which a revenue is derived); Acts (1902–3–4), p. 412 as amended by Acts (1906), p. 235, and Acts (1908), p. 377, and Acts (1912), p. 673, and Acts (1918), p. 536, and Acts (1920), p. 617, and Acts (1922), p. 492, and Acts (1930), p. 573 (waterworks, electric lights or other system from which a revenue is derived); Acts (Ex. Sess. 1933), c. 26, p. 47, as amended by Acts (1934), c. 176, p. 262, and Acts (1936), c. 124, p. 213 (the undertaking of any purpose or purposes not specifically prohibited by the Constitution of the Commonwealth).

Washington: Laws (1931), c. 39 (sewage and garbage disposal); Laws (1931), c. 53 (water, sewage disposal, stone and asphalt works, cold storage plants, electric and gas systems, street railways and transportation facilities); Laws (Ex. Sess. 1933), c. 18, as amended by Laws (1937), c. 192 (toll bridges); and c. 17 (waterworks).

West Virginia: Acts (1st Ex. Sess. 1933), c. 25, as amended by Acts (2nd Ex. Sess. 1933), c. 48 (sewers); Acts (1st Ex. Sess. 1933), c. 26, as amended by Acts (2nd Ex. Sess. 1933), c. 49 (waterworks); Laws (2nd Ex. Sess. 1933), c. 27 (toll bridges); Acts (1935), c. 68 (cemeteries, incinerator plants, hospitals, piers, docks, terminals, airports, drainage systems, flood control systems, public markets, stadia, public recreation parks, swimming pools, tennis courts, golf courses, polo grounds, public buildings, including libraries and museums, common jails, grading and paving and repaving streets and alleys).

Wisconsin: Const. Art. XI (public utilities); Statutes (1933), § 66.06 (9) and 66.06 (22) (toll bridges, telephone, heat, light, water power and sewage); Laws (1937), c. 132 (toll bridges).

Wyoming: Laws (1935), c. 75 (sewers).

APPENDIX B

Revenue Bond Cases

Alabama: Alabama State Bridge Corp. *v.* Smith, 217 Ala. 311, 116 So. 695 (1928); In re Opinions of the Justices, 225 Ala. 460, 143 So. 900 1932); In re Opinions of Justices, 226 Ala. 18, 145 So. 481 (1933); In re Opinions of Justices, 226 Ala. 570, 148 So. 111 (1933); In re Opinions of Justices, 228 Ala. 140, 152 So. 901 (1934); State *ex. rel.* Radcliff *v.* City of Mobile, 229 Ala. 93, 155 So. 872 (1934); Oppenheim *v.* City of Florence, 229 Ala. 50, 155 So. 859 (1934); Smith *v.* Town of Guin, 229 Ala. 61, 155 So. 865 (1934); Bankhead *v.* Town of Sulligent, 229 Ala. 45, 155 So. 869 (1934); Town of Opp *v.* Donaldson, 230 Ala. 689, 163 So. 332 (1935); Randall *v.* State *ex rel.* City of Tuskegee, 233 Ala. 446, 172 So. 277 (1937); Rogers *v.* Garlington, 234 Ala. 13, 173 So. 372 (1937); Smith *v.* Waterworks Board of City of Cullman, 234 Ala. 418, 175 So. 380 (1937); Alabama College *v.* Harman, 234 Ala. 446, 175 So. 394 (1937); Harman *v.* Alabama College, 235 Ala. 148, 177 So. 747 (1937).

Arizona: Board of Regents of the University of Arizona *v.* Sullivan, 45 Ariz. 245, 42 P. (2d) 619 (1935); Guthrie *v.* City of Mesa, 47 Ariz. 336, 56 P. (2d) 655 (1936); Crandall *v.* Town of Safford, 47 Ariz. 402, 56 P. (2d) 660 (1936).

Arkansas: Mississippi Valley Power Co. *v.* Board of Improvements, 185 Ark. 76, 46 S.W. (2d) 32 (1932); McCutchen *v.* City of Siloam Springs, 185 Ark. 846, 49 S.W. (2d) 1037 (1932); Jernigan *v.* Harris, 187 Ark. 705, 62 S.W. (2d) 5 (1933); Dowden *v.* McLaughlin, 189 Ark. 827, 75 S.W. (2d) 227 (1934); Freeman *v.* Jones, 189 Ark. 815, 75 S.W. (2d) 226 (1934); Johnson *v.* City of Dermott, Parker *v.* City of Little Rock, 189 Ark. 830, 75 S.W. (2d) 243 (1934); Snodgrass *v.* City of Pocahontas, 189 Ark. 819, 75 S.W. (2d) 223 (1934); Bourland *v.* City of Fort Smith, 190 Ark. 289, 78 S.W. (2d) 383 (1935); Kitchens *v.* City of Paragould, 192 Ark. 271, 90 S.W. (2d) 761 (1936); Ringgold *v.* Bailey, 193 Ark. 1, 97 S.W. (2d) 80 (1936); Brower *v.* Arkansas Centennial Commission, 194 Ark. 479, 107 S.W. (2d) 537 (1937).

California: Shelton *v.* Los Angeles, 206 Cal. 544, 275 P. 421 (1929); In re California Toll Bridge Authority, 212 Cal. 298, 298 P. 485 (1931); Garrett *v.* Swanton, 216 Cal. 220, 13 P. (2d) 725 (1932); California Toll Bridge Authority *v.* Kelly, 218 Cal. 7, 21 P. (2d) 425 (1933); Department of Water and Power of City of Los Angeles *v.* Vroman, 218 Cal. 206, 22 P. (2d) 698 (1933); Lassen Municipal Utility District *v.* Hopper, 5 Cal. (2d) 18, 53 P. (2d) 347 (1935).

Colorado: In re Canal Certificates, 19 Colo. 63, 34 P. 274 (1893); Larimer County *v.* City of Ft. Collins, 68 Colo. 364, 189 P. 929 (1920); Shields *v.* City of Loveland, 74 Colo. 27, 218 P. 913 (1923); Searle *v.* Town of Haxtun, 84 Colo. 494, 271 P. 629 (1928); Reimer *v.* Town of Holyoke, 93 Colo. 571, 27 P. (2d) 1032 (1933); Cook *et al. v.* City of Delta, 100 Colo. 7, 64 P. (2d) 1257 (1937).

Florida: State *ex rel.* Diver *v.* City of Miami, 113 Fla. 280, 152 So. 6 (1933); State *v.* City of Lake City, 116 Fla. 10, 156 So. 924 (1934); State *v.* City of Daytona Beach, 118 Fla. 29, 158 So. 300 (1934); Boykin *v.* Town of River Junction, 121 Fla. 902, 164 So. 558 (1935); Board of County Commissioners of Pinellas County *v.* Herrick, 123 Fla. 619, 167 So. 386 (1936); Hopkins *v.* Baldwin, 123 Fla. 649, 167 So. 677 (1936); Brash *v.* State Tuberculosis Board, 124 Fla. 167, 167 So. 827 (1936); Wilson *v.* City of Bartow, 124 Fla. 356, 168 So. 545 (1936); State *v.* City of Clearwater, 124 Fla. 354, 168 So. 546 (1936); State *v.* City of Punta Gorda, 124 Fla. 512, 168 So. 835 (1936); Brash *v.* State Tuberculosis Board, 124 Fla. 652, 169 So. 218 (1936); Kathleen Citrus Land Co. *v.* City of Lakeland, 124 Fla. 659, 169 So. 356 (1936); Hygema *v.* City of Sebring, 124 Fla. 683, 169 So. 366 (1936); Boykin *v.* Town of River Junction, 124 Fla. 827, 169 So. 492 (1936); Charles *v.* City of Miami, 125 Fla. 110, 169 So. 589 (1936); Roach *v.* City of Tampa, 125 Fla. 62, 169 So. 627 (1936); State *ex rel.* City of Vero Beach *v.* MacConnell, 125 Fla. 130, 169 So. 628 (1936); Williams *v.* Town of Dunnellon, 125 Fla. 114, 169 So. 631 (1936); Patton *v.* Panama City, 125 Fla. 140, 169 So. 638 (1936); Bradley *v.* City of Homestead, 125 Fla. 137, 169 So. 639 (1936); Teachy *v.* City of Wauchula, 125 Fla. 150, 169 So. 640 (1936); Vorhees *v.* City of Moore Haven, 125 Fla. 149, 169 So. 641 (1936); May Land Co. *v.* City of Fort Lauderdale, 125 Fla. 146, 169 So. 642 (1936); State *ex rel.* City of Sarasota *v.* Richards, 125 Fla. 145, 169 So. 643 (1936); Boynton *v.* City of Safety Harbor, 125 Fla. 143, 169 So. 644 (1936); Taylor *v.* City of Miami, 125 Fla. 144, 169 So. 644 (1936); State *ex rel.* City of Arcadia *v.* Daniel, 125 Fla. 151, 169 So. 645 (1936); Pentecost *v.* City of Fort Myers, 125 Fla. 152, 169 So. 645 (1936); Airth *v.* City of Live Oak, 125 Fla. 155, 169 So. 646 (1936); Blocker *v.* City of St. Petersburg, 125 Fla. 156, 169 So. 647 (1936); City of Clearwater *v.* Green, 125 Fla. 157, 169 So. 647 (1936); State *v.* City of St. Augustine, 125 Fla. 173, 169 So. 648 (1936); State *ex rel.* City of Vero Beach *v.* A. C. MacConnell, 125 Fla. 251, 169 So. 657 (1936); State *v.* Calhoun County, 125 Fla. 263, 169 So. 673 (1936); State *v.* Town of River Junction, 125 Fla. 267, 169 So. 676 (1936); Florida *v.* Overseas Road and Toll Bridge District, 125 Fla. 481, 170 So. 109 (1936); Flint *v.* Duval County, 126 Fla. 18, 170 So. 587 (1936); Florida *v.* City of Fort Pierce, 126 Fla. 184, 170 So. 742 (1936); Davis *v.* City of Melbourne, 126 Fla. 282, 170 So. 836 (1936); Dixon *v.* City of Miami, 126 Fla. 249, 170 So. 845 (1936); State of Florida *v.* Calhoun County, Fla., 126 Fla. 376, 170 So. 883 (1936); State of Florida *v.* Plant City, 127 Fla. 495, 173 So. 363 (1937); T. L. Brooks *v.* City of Jacksonville, 127 Fla. 564, 173 So. 365 (1937); King *v.* Duval County, 128 Fla. 388, 174 So. 817 (1937); City of Hialeah *et al v.* State *ex rel.* Ben Hur Life Ass'n, 128 Fla. 46, 174 So. 843 (1937); Broward County

City, 140 Kan. 471, 37 P. (2d) 18 (1934); Kansas Power Co. *v.* Fairbanks, Morse & Co., 142 Kan. 109, 45 P. (2d) 872 (1935); Kansas Power Co. *v.* City of Washington, 145 Kan. 962, 67 P. (2d) 1095 (1937).

Kentucky: City of Bowling Green *v.* Kirby, 220 Ky. 839, 295 S.W. 1004 (1927); Klein *v.* City of Louisville, 224 Ky. 624, 6 S.W. (2d) 1104 (1928); Bloxton *v.* State Highway Commission, 225 Ky. 324, 8 S.W. (2d) 392 (1928); Jones *v.* Rutherford, 225 Ky. 773, 10 S.W. (2d) 296 (1928); Jones *v.* City of Corbin, 227 Ky. 674, 13 S.W. (2d) 1013 (1929); State Highway Commission *v.* Veiling, 230 Ky. 381, 19 S.W. (2d) 967 (1929); Estes *v.* State Highway Commission, 235 Ky. 86, 29 S.W. (2d) 583 (1930); City of Sturgis *v.* Christenson Bros. Co., 235 Ky. 346, 31 S.W. (2d) 386 (1930); Williams *v.* City of Raceland, 245 Ky. 212, 53 S.W. (2d) 370 (1932); Wheeler *v.* Board of Commrs. of City of Hopkinsville, 245 Ky. 388, 53 S.W. (2d) 740 (1932); Kentucky Utilities Co. *v.* City of Paris, 248 Ky. 252, 58 S.W. (2d) 361 (1933); Juett *v.* Town of Williamstown, 248 Ky. 235, 58 S.W. (2d) 411 (1933); Clay *v.* Board of Regents of Morehead State Teachers' College, 255 Ky. 846, 75 S.W. (2d) 550 (1934); Nourse *v.* City of Russellville, 257 Ky. 525, 78 S.W. (2d) 761 (1935); Kentucky Utilities Co. *v.* City of Paris, 256 Ky. 226, 75 S.W. (2d) 1082 (1934); Covington Bridge Commission *v.* City of Covington, 257 Ky. 813, 79 S.W. (2d) 216 (1934); Francis *v.* City of Bowling Green, 259 Ky. 525, 82 S.W. (2d) 804 (1935); Hughes *v.* State Board of Health, 260 Ky. 228, 84 S.W. (2d) 52 (1935); Van Hooser & Co. *v.* University of Kentucky, 262 Ky. 581, 90 S.W. (2d) 1029 (1936); Security Trust Co. *v.* City of Paris, 264 Ky. 846, 95 S.W. (2d) 781 (1936); Board of Commissioners of City of Middlesboro *v.* Kentucky Utilities Co., 267 Ky. 99, 101 S.W. (2d) 414 (1936).

Louisiana: Gisclard *v.* Donaldsonville, 159 La. 738, 106 So. 287 (1925); McCann *v.* Mayor and Councilmen of Morgan City, 173 La. 1063, 139 So. 481 (1932); Caldwell Brothers *v.* Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, 176 La. 825, 147 So. 5 (1933); State *ex rel.* Porterie *v.* Charity Hospital of Louisiana at New Orleans, 182 La. 268, 161 So. 606 (1935).

Maryland: Mayor of Baltimore *v.* Gill, 31 Md. 375 (1869).

Michigan: Young *v.* City of Ann Arbor, 267 Mich. 241, 255 N.W. 579 (1934); Block *v.* City of Charlevoix, 267 Mich. 255, 255 N.W. 579 (1934); Gilbert *v.* Traverse City, 267 Mich. 257, 255 N.W. 585 (1934); Attorney General *ex rel.* Eaves *v.* State Bridge Comm., 277 Mich. 373, 269 N.W. 388 (1936); Jones *v.* City of Detroit, 277 Mich. 272, 269 N.W. 171 (1936); Attorney General *ex rel.* Eaves *v.* State Bridge Comm., 277 Mich. 373, 380, 270 N.W. 308 (1936); Michigan Gas & Elec. Co. *v.* City of Dowagiac, 278 Mich. 522, 270 N.W. 773 (1936); Bacon *v.* Detroit, 282 Mich. 150, 275 N.W. 800 (1937).

Minnesota: Fanning *v.* University of Minnesota, 183 Minn. 222, 236 N.W. 217 (1931); Williams *v.* Village of Kenyon, 187 Minn. 161, 244 N.W. 558 (1932).

Mississippi: Street *v.* Town of Ripley, 173 Miss. 225, 161 So. 855 (1935).

Missouri: State *ex rel.* Smith *v.* Mayor, etc. of City of Neosho, 203

Mo. 40, 101 S.W. 99 (1907); Bell *v.* City of Fayette, 325 Mo. 75, 28 S.W. (2d) 356 (1930); Hight *v.* City of Harrisonville, 328 Mo. 549, 41 S.W. (2d) 155 (1931); Hagler *v.* City of Salem, 333 Mo. 330, 62 S.W. (2d) 751 (1933); State *ex rel.* City of Blue Springs *v.* McWilliams, 335 Mo. 816, 74 S.W. (2d) 363 (1934); State *ex rel.* City of Hannibal *v.* Smith, 335 Mo. 825, 74 S.W. (2d) 367 (1934); Sager *v.* City of Stanberry, 336 Mo. 213, 78 S.W. (2d) 431 (1934); State *ex rel.* City of Excelsior Springs *v.* Smith, 336 Mo. 1104, 82 S.W. (2d) 37 (1935); Grossman *v.* Public Water Supply District No. 1 of Clay County, 339 Mo. 344, 96 S.W. (2d) 701 (1936).

Montana: Barbour *v.* State Board of Education, 92 Mont. 321, 13 P. (2d) 225 (1932); Veeder *v.* State Board of Education, 97 Mont. 121, 33 P. (2d) 516 (1934); State *ex rel.* Blume *v.* State Board of Education, 97 Mont. 371, 34 P. (2d) 515 (1934); Hawkins *v.* State Board of Examiners, 97 Mont. 441, 35 P. (2d) 116 (1934); State *ex rel.* Normile *v.* Cooney, 100 Mont. 391, 47 P. (2d) 637 (1935); Farmers State Bank of Conrad *v.* City of Conrad, 100 Mont. 415, 47 P. (2d) 853 (1935); State *ex rel.* Dragstedt *v.* State Board of Education *et al.*, 103 Mont. 336, 62 P. (2d) 330 (1936).

Nebraska: Carr *v.* Fenstermacher, 119 Neb. 172, 228 N.W. 114 (1929); Interstate Power Co. of Nebraska *v.* City of Ainsworth, 125 Neb. 419, 250 N.W. 649 (1933); State *ex rel.* Loseke *v.* Fricke, 126 Neb. 736, 254 N.W. 409 (1934); State *ex rel.* City of Columbus *v.* Price, 127 Neb. 132, 254 N.W. 889 (1934); Kirby *v.* Omaha Bridge Commission, 127 Neb. 382, 255 N.W. 776 (1934); Southern Nebraska Power Co. *v.* Village of Deshler, 130 Neb. 598, 265 N.W. 880 (1936).

New Jersey: Wilson *v.* State Water Supply Comm., 84 N.J. Eq. 150, 93 Atl. 732 (1915); Jersey Central Power & Light Co. *v.* Borough of Seaside Heights, 117 N.J. 253, 187 Atl. 533 (1936).

New Mexico: Palmer *v.* City of Albuquerque, 19 N.M. 285, 142 P. 929 (1914); State *v.* Regents of University of New Mexico, 32 N.M. 428, 258 P. 571 (1927); Seward *v.* Bowers, 37 N.M. 385, 24 P. (2d) 253 (1933).

New York: Rodman *v.* Munson, 13 Barb. (N.Y. S. Ct.) 63 (1852); Newell *v.* People, 7 N.Y. 9 (1852); Kelly v. Merry, 262 N.Y. 151, 186 N.E. 425 (1933); Robertson *v.* Zimmermann, 268 N.Y. 52, 196 N.E. 740 (1935); Tierney *v.* Cohen, 268 N.Y. 464, 198 N.E. 225 (1935); McCabe *v.* Gross *et al.*, 274 N.Y. 39, 8 N.E. (2d) 269 (1937).

North Carolina: Brockenbrough *v.* Board of Water Commissioners of City of Charlotte, 134 N.C. 1, 46 S.E. 28 (1903); Williamson (Duke Power Co. Intervener) *v.* City of High Point, 213 N.C. 96, 195 S.E. 90 (1938); Gill *v.* City of Charlotte, 213 N.C. 160, 195 S.E. 368 (1938).

North Dakota: State *ex rel.* Board of University and School Lands *v.* McMillan, 12 N.D. 280, 96 N.W. 310 (1903); Wilder *v.* Murphy, 56 N.D. 436, 218 N.W. 156 (1928); Lang *v.* City of Cavalier, 59 N.D. 75, 228 N.W. 819 (1930); State *ex rel.* Kaufman *v.* Davis, 59 N.D. 191, 229 N.W. 105 (1930); Thomas *v.* McHugh, 65 N.D. 149, 256 N.W. 763 (1934).

Ohio: Kasch *v.* Miller, 104 Ohio St. 281, 135 N.E. 813 (1922); Pathe *v.* Donaldson, 29 Ohio App. 171, 163 N.E. 204 (1928).

Oklahoma: Zachary *v.* City of Wagoner, 146 Okla. 268, 292 P. 345 (1930); City of Tecumseh *v.* Butler, 148 Okla. 151, 298 P. 256 (1931); Blake *v.* Abraham, 149 Okla. 112, 299 P. 488 (1931); Baker *v.* Carter, 165 Okla. 116, 25 P. (2d) 747 (1933); Layne-Western Co. *v.* City of Depew, 177 Okla. 338, 59 P. (2d) 269 (1936); State *ex rel.* R. J. Edwards, Inc. *v* Keith, 179 Okla. 563, 66 P. (2d) 1059 (1937); Boswell *v.* State, 181 Okla. 435, 74 P. (2d) 940 (1937); Sheldon *v.* Grand River Dam Authority, 182 Okla. 24, 76 P. (2d) 355 (1938).

Oregon: Butler *v.* City of Ashland, 113 Ore. 134, 232 P. 655 (1925); McClain *v.* Regents of the University, 124 Ore. 629, 265 P. 412 (1928).

Pennsylvania: Lesser *v.* Warren Borough, 237 Pa. 501, 85 A. 839 (1912); Schuldice *v.* City of Pittsburgh, 251 Pa. 28, 95 A. 938 (1915); Hoffman *v.* Kline, 300 Pa. 485, 150 A. 889 (1930); Tranter *v.* Allegheny County Authority, 316 Pa. 65, 173 A. 289 (1934); Realty Co. *v.* Borough of Port Vue, 318 Pa. 374, 178 A. 466 (1935); Kelley *v.* Earle, 320 Pa. 449, 182 A. 501 (1936); Kelley *v.* Earle, 325 Pa. 337, 190 A. 140 (1937).

South Carolina: Cathcart *v.* City of Columbia, 170 S C. 362, 170 S.E. 435 (1933); Roach *v.* City of Columbia, 172 S.C. 478, 174 S.E. 461 (1934); Park *v.* Greenwood County, 174 S C. 35, 176 S.E. 870 (1934); Clarke *v.* South Carolina Public Service Authority, 177 S.C. 427, 181 S.E. 481 (1935); Bollin *v.* Graydon, 177 S C. 374, 181 S.E. 467 (1935); Crawford *v.* Johnston, 177 S.C. 399, 181 S.E. 476 (1935); Simons *v.* City Council of Charleston, 181 S.C. 353, 187 S.E. 545 (1936).

South Dakota: Hesse *v.* City of Watertown, 57 S.D. 325, 232 N.W. 53 (1930).

Tennessee: Town of Selmer *v.* Allen, 166 Tenn. 476, 63 S.W. (2d) 663 (1933); Tenn. Elec. Power Co. *v.* Town of Fayetteville, Tenn., 173 Tenn. 111, 114 S.W. (2d) 811 (1938).

Texas: Sowell *v.* Griffith (Tex. Comm. App. 1927) 294 S.W. 521; Womack *v.* City of West University Place (Tex. Civ. App. 1930) 32 S.W. (2d) 930; City of Dayton *v.* Allred, 123 Tex. 60, 68 S.W. (2d) 172 (1934); McCann v. Akard (Tex. Comm. App. 1934) 68 S.W. (2d) 1033; City of Richmond *v.* Allred, 123 Tex. 365, 71 S.W. (2d) 233 (1934); City of Houston *v.* Allred, 123 Tex. 334, 71 S.W. (2d) 251 (1934); City of Cross Plains *v.* Radford (Tex. Civ. App. 1934) 73 S.W. (2d) 1093; City of Corpus Christi *ex rel.* Harris *v.* Flato (Tex. Civ. App. 1935) 83 S.W. (2d) 433; Lower Colorado River Authority *v.* McCraw, 125 Tex. 268, 83 S.W. (2d) 629 (1935); Radford *v.* City of Cross Plains (Tex. Comm. App. 1935) 86 S.W. (2d) 204; Fisher *v.* City of Bartlett (Tex. Civ. App. 1934) 76 S.W. (2d) 535, affd. (Tex. Civ. App. 1935) 88 S W. (2d) 1068; City of Waco *v.* McCraw, 127 Tex. 268, 93 S.W. (2d) 717 (1936); City of Seymour *v.* Municipal Acceptance Corporation (Tex. Civ. App. 1936) 96 S.W. (2d) 814; Hoff *v.* Westhoff (Tex. Civ. App. 1936) 102 S.W. 293; Texas Power and Light Co. *v.* City of Sulphur Springs (Tex. Civ. App. 1937), 103 S.W. (2d) 859; City of Huntsville *v.* McCraw, 130 Tex. 121, 108 S.W. (2d) 204 (1937); City of Del Rio *v.* Lowe (Tex. Civ. App. 1937) 111 S.W. (2d) 1208.

Utah: Barnes *v.* Lehi City, 74 Utah 321, 279 P. 878 (1929); Fjeldsted *v.* Ogden City, 83 Utah 278, 28 P. (2d) 144 (1933); Wadsworth *v.*

Santaquin City, 83 Utah 321, 28 P. (2d) 161 (1933); Fjeldsted *v.* Ogden City, 84 Utah 302, 35 P. (2d) 825 (1934); Utah Power and Light Co. *v.* Provo City, 94 Utah 203, 74 P. (2d) 1191 (1937).

Virginia: Light *v.* City of Danville, 168 Va. 181, 190 S.E. 276 (1937); Ennis *et al.* *v.* Town of Herndon, *et al.*, 168 Va. 539, 191 S.E. 685 (1937).

Washington: Winston *v.* City of Spokane, 12 Wash. 524, 41 P. 888 (1895); Kenyon *v.* City of Spokane, 17 Wash. 53, 48 P. 783 (1897); Faulkner *v.* City of Seattle, 19 Wash. 320, 53 P. 365 (1898); State *ex rel.* City of Port Townsend *v.* Clausen, 40 Wash. 95, 82 P. 187 (1905); Dean *v.* City of Walla Walla, 48 Wash. 75, 92 P. 895 (1907); Griffin *v.* City of Tacoma, 49 Wash. 524, 95 P. 1107 (1908); Schooley *v.* City of Chehalis, 84 Wash. 667, 147 P. 410 (1915); Uhler *v.* City of Olympia, 87 Wash. 1, 151 P. 117, 152 P. 998 (1915); Twichell *v.* City of Seattle, 106 Wash. 32, 179 P. 127 (1919); Asia *v.* Seattle, 119 Wash. 674, 206 P. 366 (1922); James *v.* City of Seattle, 163 Wash. 190, 300 P. 515 (1931).

West Virginia: Bates *v.* State Bridge Commission, 109 W.Va. 186, 153 S.E. 305 (1930); Brewer *v.* City of Point Pleasant, 114 W.Va. 572, 172 S.E. 717 (1934); Casto *v.* Town of Ripley, 114 W.Va. 668, 173 S.E. 886 (1934); Warden *v.* City of Grafton, 115 W.Va. 438, 176 S.E. 706 (1934).

Wisconsin: Connor *v.* City of Marshfield, 128 Wis. 280, 107 N.W. 639 (1906); State *ex rel.* Morgan *v.* City of Portage, 174 Wis. 588, 184 N.W. 376 (1921); Payne *v.* City of Racine, 217 Wis. 550, 259 N.W. 437 (1935); Morris *v.* Ellis, 221 Wis. 307, 266 N.W. 921 (1936).

Wyoming: Arnold *v.* Bond, 47 Wyo. 236, 34 P. (2d) 28 (1934).

Federal Cases: Franklin Trust Co. *v.* City of Loveland (C.C.A. 8th, 1924) 3 F. (2d) 114; City of Jerseyville *v.* Connett (C.C.A. 7th, 1931) 49 F. (2d) 246; City of Campbell *v.* Arkansas-Missouri Power Co. (C.C.A. 8th, 1932) 55 F. (2d) 560; Iowa Southern Utilities Co. *v.* Cassill (C.C.A. 8th, 1934) 69 F. (2d) 703; George *v.* City of Asheville (C.C.A. 4th, 1935) 80 F. (2d) 50; Iowa Southern Utilities Co. *v.* Town of Lamoni (D.C. Iowa, 1935) 11 F. Supp. 581; Illinois Power and Light Corp. *v.* City of Centralia (D.C. Ill., 1935) 11 F. Supp. 874; Fairbanks, Morse and Co. *v.* City of Wagoner (C.C.A. 10th, 1936) 81 F. (2d) 209; Northwestern Light and Power Co. *v.* Town of Milford (C.C.A. 8th, 1936) 82 F. (2d) 45; Iron Products Investment Co. *v.* City of Picher (C.C.A. 10th, 1936) 83 F. (2d) 443; Fairbanks, Morse and Co. *v.* City of Wagoner (C.C.A. 10th, 1936) 86 F. (2d) 288; Pacific Gas and Elec. Co. *v.* Sacramento Municipal Utility District (C.C.A. 9th, 1937) 92 F. 365; City of Hamlin *v.* Brown-Crummer Invest. Co. (C.C.A. 5th, 1938) 93 F. (2d) 680.

APPENDIX C

A Typical Revenue Bond Form

The revenue bond form[1] prescribed by the Detroit, Michigan, Common Council, October 28, 1935, for use in connection with its PWA sewer revenue loan follows:

The Bonds herein authorized shall be in substantially the following form:

United States of America
State of Michigan
County of Wayne
City of Detroit
Sewage Disposal System Bond
No. 1 .. ... $1,000 00

Know All Men By These Presents, that the City of Detroit, Michigan, for value received, hereby promises to pay to the bearer, or, if registered, to the registered holder hereof, but only out of the revenue of the Sewage Disposal System, including all future additions and extensions thereto, the sum of One Thousand ($1,000) Dollars on the 15th day of October, 1939, with interest thereon from the date hereof until maturity at the rate of four per centum (4%) per annum, payable semi-annually on the 15th day of April and on the 15th day of October of each year, on presentation and surrender of the annexed interest coupons as they severally become due. Both principal of and interest on this bond are payable in lawful money of the United States of America, at the office of the Treasurer of the City of Detroit, or, at the option of the holder, at its current official bank in the Borough of Manhattan in the City and State of New York, and for the prompt payment thereof the gross revenue of said Sewage Disposal System, including all future additions and extensions thereto, after provision has been made for reasonable and necessary expenses for operation, administration and maintenance, is hereby irrevocably pledged, and a statutory first lien thereon is hereby created.

This bond is one of a series of eleven thousand (11,000) bonds of like date and tenor, except as to date of maturity, aggregating the sum of Eleven Million ($11,000,000) Dollars issued pursuant to the authority of Act No. 94 of the Public Acts of Michigan, 1933, and of an Ordinance No. . . duly adopted in pursuance thereof by the Common Council of

[1] Sec. 15 of Ordinance No. 340-C.

the City of Detroit on . . , 1935, for the purpose of constructing a sewage disposal system, including a sewage disposal plant and sewer interceptors and other incidentals, for the City of Detroit, and is payable solely out of the revenue of the said Sewage Disposal System, including all future additions and extensions thereto. The City of Detroit hereby covenants and agrees to fix and maintain at all times while any of such bonds shall be outstanding such rates for services furnished by said Sewage Disposal System, including all future additions and extensions thereto, as shall be sufficient to provide for the payment of the expenses of administration and operation of said Sewage Disposal System, including all future additions and extensions thereto, and such expenses for the maintenance thereof as are neeccessary to preserve the same in good repair and working order, to provide for the payment of the interest upon and principal of all such bonds as and when the same become due and payable, to create a bond and interest redemption fund therefor, to build up a reserve for depreciation of said Sewage Disposal System, including all future additions and extensions thereto, and to build up a reserve for improvements, betterments and extensions to said Sewage Disposal System other than those necessary to maintain the same in good repair and working order.

This bond is a self-liquidating revenue bond and the principal of and interest on this bond are exempted from any and all state, county, city, incorporated village, municipal and other taxation whatsoever under the laws of the State of Michigan and is secured by the statutory lien created by said Act No. 94 of the Public Acts of Michigan, 1933, and payable solely from the revenues of said Sewage Disposal System, including all future additions and extensions thereto, and is not a general obligation of the City of Detroit, and does not constitute an indebtedness of said City of Detroit within any State Constitutional provision or Statutory limitation.

The City of Detroit reserves the right to redeem this bond on any interest payment date, upon payment of par and accrued interest plus a premium of ¼ of one (1) per centum per year or fraction thereof from the date of redemption to date of maturity, and in the event this bond is so called for redemption, notice thereof shall be published in a newspaper published in the English language and of general circulation in the City of Detroit, Michigan, once a week for four successive calendar weeks, the date of first publication to be at least sixty days prior to the date fixed for redemption, and after like publication in a similar newspaper published and of general circulation in the Borough of Manhattan, City of New York, New York. If this bond shall not be presented on the date so fixed for redemption, it shall cease to bear interest from and after said date.

This bond may be registered, as to principal only, without expense to the holder, on the books of the Controller of the City of Detroit in the name of the holder, and such registration noted on the back hereof by the Controller of the City of Detroit, after which no transfer shall be valid unless made on the books and noted on the back hereof in like manner, but transferability by delivery may be restored by registration to bearer. Such registration shall not affect the negotiability of the interest coupons. On demand of the holder and upon surrender of all unmatured coupons this bond may be exchanged, without cost to the holder, for a bond fully

registered as to principal and interest, bearing the same rate of interest and of like maturity. A fully registered bond may, upon demand of the registered holder thereof, be exchanged for one or more coupon bonds of $1,000 denomination, registerable as to principal only and with all unmatured coupons attached. The principal amount of such coupon bonds shall aggregate the principal amount of said registered bond and they shall be of like tenor. For each coupon bond so received, a charge, not to exceed fifty cents (50¢) per bond may be made.

It is hereby certified and recited that all acts, conditions and things required by law precedent to and in the issuance of this bond exist and have been done and performed in regular and due time and form as required by law.

In Witness Whereof, the Common Council of the City of Detroit, Michigan, has caused this Bond to be signed in the name of the City of Detroit by the Mayor and countersigned by the Controller of said city, and has caused the corporate seal of the City of Detroit duly attested by the City Clerk to be hereunto affixed, and the coupons hereto attached to be signed by the facsimile signatures of said Mayor and said Controller, which officials by the execution of this Bond do adopt as and for their own proper signatures their respective facsimile signatures appearing on said coupons, and this bond to be dated the 15th day of October, 1935.

Attest:

Countersigned:

(Seal)

....

City Clerk

....

Controller

....

Mayor

Bibliography

Bibliography

Constitutions and statutes of the Federal government and of the states; municipal charters, resolutions, ordinances, and indentures; Federal and state court decisions; annual reports published by the borrowers (or lenders, as in the case of the government agencies); PWA forms; press releases by the PWA and RFC; and prospectuses and circulars issued in connection with new issues—all were extensive sources of information. In addition to these documents and records, the following publications proved to be the most helpful.

Books

Bird, Frederick L., *The Management of Small Municipal Lighting Plants*, Municipal Administration Service, New York, 1932.

Chatters, Carl H., and Hillhouse, Albert M., *Local Government Debt Administration*, Prentice-Hall, New York, 1939.

Corwin, Edward S., *The Twilight of the Supreme Court*, Yale University Press, New Haven, 1934.

Fowler, John F., Jr., *Revenue Bonds*, Harper & Brothers, New York, 1938.

Gayer, Arthur D., *Public Works in Prosperity and Depression*, National Bureau of Economic Research, New York, 1935.

Gordon, Lincoln, *The Public Corporation in Great Britain*, Oxford University Press, New York, 1938.

Hillhouse, A. M., *Municipal Bonds*, Prentice-Hall, Inc., New York, 1936.

Ickes, Harold L., *Back to Work*, The Macmillan Company, New York, 1935.

Jones, Leonard A., *The Law of Bonds and Bond Securities*, Bobbs-Merrill Company, Indianapolis, 4th ed., 1935.

McQuillin, Eugene, *A Treatise on the Law of Municipal Corporations*, Seven Volumes and Supplement, Vol. VI revised to August, 1936, 2nd edition, Callaghan & Company, Chicago, 1928.

Moody's Manual: Governments and Municipals annual volumes.

Municipal Year Book, annual volumes.

Public Enterprise, William A. Robson, editor, George Allen and Unwin, Ltd., London, 1937.

Studensky, Paul, *Public Borrowing*, National Municipal League, New York, 1930.

Thurston, John, *Government Proprietary Corporations in the English-Speaking Countries*, Harvard University Press, Cambridge, 1937.

Monographs, Brochures and Reports

A Detailed Analysis of Commonwealth of Kentucky Bridge Revenue Bonds, Harris, Forbes and Company, New York, 1931.

Are Revenue Bonds Issued by States, Municipalities or Agencies Thereof Exempt from Taxation? Stranahan, Harris, and Company, Inc., New York, 1936.

Couch, Harvey, *Financing the Construction of Self-Liquidating Public Projects Through the Reconstruction Finance Corporation,* U. S. Government Printing Office, Washington, 1932.

Hall, William O., *Memorandum on Financing Local Improvements in Oregon,* Bureau of Municipal Research and Service, University of Oregon, Eugene, 1936.

Hamilton, Henry Raymond, *Water Revenue Bonds,* Lewis, Pickett and Company, Inc., Chicago, 1937.

Kendall, Theodore Reed, "Sewer-Rental Laws," *Municipal Index: 1936.*

Kentucky Bridge Revenue Bonds, Bankers Bond Company, Inc., Louisville, 1937.

Kentucky Bridge Revenue Bonds, J. J. B. Hilliard and Son, Louisville, 1937.

Municipal Advisory Council of Michigan, *Statement of Indebtedness of All Governmental Units in the State of Michigan, as of Jan. 1, 1937,* Detroit, 1937.

On the Nature and Origin of Revenue Bonds of Political Subdivisions, Stranahan, Harris and Oatis Company, New York, 1928.

Proceedings of the Thirty-first Annual Convention of the Association of Life Insurance Presidents (n.d.).

Report of the Joint Legislative Committee on State Fiscal Policies, Legislative Document (1938), No. 41, Albany, 1938.

Schuckman, F. A., *The Effect of Debt Limitations on Municipal Ownership,* unpublished master's thesis, Columbia University Library, 1930.

Secrist, Horace, *An Economic Analysis of the Constitutional Restrictions upon Public Indebtedness in the United States,* Bulletin No. 637, University of Wisconsin, Madison, 1914.

Spangler, Frank L., *Operation of Debt and Tax Rate Limits in the State of New York,* Special Report of the State Tax Commission, No. 5, New York State Tax Commission, The J. B. Lyon Company, Albany, 1932.

The Investment Merits of American Municipal Bonds, Halsey, Stuart and Company, Inc., Chicago, 1937.

The Port of New York Authority: A Monograph, The Port of New York Authority, New York, 1936.

The Tax Exempt Status of State and Municipal Bonds, An Opinion by Thomson, Wood and Hoffman, no publisher named, New York, 1937.

Tenner, Irving, *Municipal Finance Legislation: 1937, A Digest,* Public Administration Service, Chicago, 1938.

Thoron, B. W., "The Federal Emergency Administration of Public Works,"

The Municipal Year Book: 1937, International City Managers' Association, Chicago, 1937.
Waring, F. H., *Sewer Rental in Ohio* (n.d.).

Periodicals and Newspapers

"Administration of Municipal Credit," 43 *Yale Law Journal* 924 (April 1934).
American City.
Barber, Earl H., "Forty Years of Public Ownership," *Journal of Land and Public Utility Economics*, X (November 1934), 325.
Benton, Philip M., "Public Bodies and the PWA," *Investment Banking*, VI (Nov. 19, 1935), 53.
Bird, Frederick L., "The Problem of Revenue Bonds," *National Municipal Review*, XXVII (June 1938), 6.
Bond Buyer.
"Comment," 4 *George Washington Law Review* 283 (January 1936).
Commercial and Financial Chronicle.
Congressional Record.
Daily Bond Buyer.
Davis, Horace A., "Borrowing Machines," *National Municipal Review*, XXIV (May 1935), 328.
Dimock, Edward J., "Legal Problems of Financially Embarrassed Municipalities," 22 *Virginia Law Review* 39 (November 1935).
Durisch, Lawrence L., "Municipal Debt Limits and the Financing of Publicly Owned Utilities," *National Municipal Review*, XX (August 1931), 460.
Foley, E. H., Jr., "Legal Aspects of Low-Rent Housing in New York," 6 *Fordham Law Review* 1 (January 1937).
———, "Low-Rent Housing and State Financing," 85 *University of Pennsylvania Law Review* 239 (January 1937).
———, "Revenue Financing of Public Enterprises," 35 *Michigan Law Review* 1 (November 1936).
———, "Some Recent Developments in the Law Relating to Municipal Financing of Public Works," 4 *Fordham Law Review* 13 (January 1935).
Fordham, Jeff B., "Methods of Enforcing Satisfaction of Obligations of Public Corporations," 33 *Columbia Law Review* 28 (January 1933).
Frye, Arnold, "Municipal Insolvency; Its Special Problems from the Point of View of the General Practitioner," 2 *Legal Notes on Local Government* 195 (January 1937).
Fuller, Ambrose, "Conditional Sales Contracts in Municipal Purchases—Financing Self-Liquidating Activities," 3 *Legal Notes on Local Government* 267 (March 1938).
Geffs, Jacob, and Hepburn, William M., "Public Authorities and Cooperatives to Promote the Use of Electricity," 25 *Georgetown Law Journal* 827 (May 1937).
Gorenfeld, A., "Power of Municipal Utility Districts to Issue Revenue Bonds," 10 *Southern California Law Review* 333 (March 1937).

Goss, Dr. B. C., "Elimination of Tax Exempt Status of Municipals Would Create Problems," *Financial Reporter,* IV (April 28, 1938), 265.

————, "Public Authorities and the Investor," *Financial Reporter,* III (Feb. 20, 1937), 417.

Hanser, Hugo E., "The Trend of the Authority in Public Finance," *Financial Reporter,* II (Dec. 3, 1936), 8.

Hawtrey, R. G., "The Finance of Publicly Owned Utilities in Relation to the General National Finance," *Public Administration,* IV (October 1926), 352.

Hopkin, W. H., "Financing School Building Construction in Kentucky," *Municipal Finance, X* (August 1937), 45.

Johnson, J. R., "The Finance of Publicly Owned Utilities in Relation to the General National or Local Finance," *Public Administration,* IV (October 1926), 377.

Lowndes, Charles L. B., "The Federal Income Tax and Interest from State and Municipal Bonds," 3 *Legal Notes on Local Government* 345 (May 1938).

Kilpatrick, Wylie, "Federal Regulation of Local Debt," *National Municipal Review,* XXVI (June 1937), 283.

Klassen, C. W. and Wisely, W. H., "The Newer Methods of Sewage Works Financing," *Water Works and Sewage,* LXXXIV (March 1937), 88.

"Loans from the PWA in Excess of City Debt Limits," 47 *Harvard Law Review* 688 (February 1934).

Mackenzie, J. L., "The Finance of Publicly Owned Utilities in Relation to the General National or Local Finance," *Public Administration,* IV (October 1926), 389.

McDonnell, Robert E., "Little Rock Enjoys Pure, Soft Water Supply," *Water Works Engineering,* XCI (March 30, 1938), 370.

Mansfield, Lewis P., "State Control of Municipal Finance," *National Municipal Review,* XXIV (June 1934), 311.

Meuth, George W., "The Development of Financing Public Improvements by Kentucky Municipalities," 25 *Kentucky Law Journal* 230 (March 1937).

Musatti, James, "Revenue Bond Bills," *Tax Digest,* XIII (April 1935), 114.

National Municipal Review.

Nehemkis, Peter R., Jr., "The Public Authority: Some Legal and Practical Aspects," 47 *Yale Law Journal* 14 (November 1937).

New York Herald Tribune.

Parker, Frank, "Constructing and Financing Toll Bridges," *The Journal of Land and Public Utility Economics,* VII (May 1931), 127.

Pershing, John, "Revenue Bond Remedies," 22 *Cornell Law Quarterly* 64 (December 1936).

"Report of Municipal Securities Committee," *Investment Banking,* VII (June 1, 1937), 272.

Shenton, Clarence G., "The City in the State Constitution," *Annals of the American Academy,* CLXXXI (September 1935), 170.

Shultz, William J., "Limitations on State and Local Borrowing Powers," *Annals of the American Academy,* CLXXXI (September 1935), 118.

State and Municipal Compendium, William B. Dana Company, New York, published semi-annually.

Taft, Robert A., "A Review of the Special Lien Bond Situation," *Journal of the American Water Works Association,* XXVII (October 1935), 1343.

The New York Times.

Williams, C. Dickerman, and Nehemkis, Peter R., Jr., "Municipal Improvements as Affected by Constitutional Debt Limitations," 37 *Columbia Law Review* 177 (February 1937).

Zwerner, Adolph H., "Indiana Municipal Revenue Bond Financing," 12 *Indiana Law Journal* 266 (April 1937).

Government Publications

Annual Report of the Tennessee Valley Authority for the Fiscal Year Ended June 30, 1938, U. S. Government Printing Office, Washington, 1938.

Census of Electrical Industries: Central Electric Light and Power Stations: 1932, Bureau of the Census, U. S. Department of Commerce, Washington, 1934.

Federal Emergency Administration of Public Works, Circular No. 1, *The Purposes, Policies, Functioning and Organization of the Emergency Administration,* U. S. Government Printing Office, Washington, 1933.

——————, Circular No. 2, *Information Required with Applications for Loans to States, Counties, Municipalities, and Other Public Bodies,* U. S. Government Printing Office, Washington, 1933.

Hearings Before the Subcommittee of the Committee on Appropriations, House of Representatives, 75th Congress, First Session, on the Proposed Bill to Extend until June 30, 1939, the Funds and Authority of the Public Works Administration, U. S. Government Printing Office, Washington, 1937.

Hearings Before the Subcommittee of the Committee on Appropriations, House of Representatives, 75th Congress, Third Session, on the Emergency Relief Appropriation Act of 1938 and Public Works Administration Appropriation Act of 1938, U. S. Government Printing Office, Washington, 1938.

Injunctions in Cases Involving Acts of Congress, Senate Document No. 27, 75th Congress, First Session, 1937, U. S. Government Printing Office, Washington, 1937.

Internal Revenue Bulletin, 1938: No. 19, May 9, 1938, Bureau of Internal Revenue, Treasury Department, U. S. Government Printing Office, Washington, 1938.

List of PWA Projects Involved in Litigation: Power Division, PWA Report No. 71295 (mimeographed), April 1, 1937.

National Resources Board: Report, December 1, 1934, U. S. Government Printing Office, Washington, 1934.

Non-Federal PWA Power Projects, Federal Emergency Administration of Public Works (no publisher), Washington, 1937.

Report of Rural Electrification Administration: 1937, U. S. Government Printing Office, Washington, 1938.

Revenue Bond Financing by Political Subdivisions: Its Origin, Scope, and Growth in United States, Federal Emergency Administration of Public Works, U. S. Government Printing Office, Washington, 1936.

Taxation of Government Bondholders and Employees, U. S. Department of Justice, U. S. Government Printing Office, Washington, July 1938.

U. S. Government Manual, National Emergency Council, Washington, perpetually revised.

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